

Faculty of Information Technology  
Department of Information Systems

Approved

Vice-Rector for Academic and Educational  
Affairs of IITU JSC, PhD

\_\_\_\_\_ Umarov T.F.

«\_\_» \_\_\_\_\_ 2020

**SYLLABUS  
(ACADEMIC PROGRAM)**

**Course:** VSP 3307 Introduction to SAP Programming on ABAP (ERP 2)

**Major:** 5B070300 «Information Systems»

**Educational program (code, title):** 6B06105 «Information System»

**Year:** 3; **Semester:** 5; **Number of credits:** 5 ECTS

**Lectures:** 15 hours

**Laboratory classes:** 30 hours

**T/SIS:** 105 hours

**Total:** 150 hours

**Final assessment form:** Examination

Almaty 2020

Academic program of the course VSP 3307 Introduction to SAP Programming on ABAP (ERP 2) has been developed on the basis of Standard Academic Program.

Academic program has been reviewed at the meeting of Information systems department.

Minutes №. 1 dated «17» August 2020

Head of the Department \_\_\_\_\_ A.B. Kasymova, ass. professor, PhD

Author \_\_\_\_\_ Karimzhan Nurlan Berlibekuly, senior lecturer, MSIT in eBiz Technology

The working academic program was approved at the meeting of the Educational and Methodological Board of JSC "IITU"

Minutes № 1 dated "28" 08 2020

Director of the Department \_\_\_\_\_ Mustafina A.K.  
*Signature*  
for Academic Affairs

<b>1. General information</b>	
Faculty	Information Technology
Major code and title	VSP 3307 Introduction to SAP Programming on ABAP (ERP 2)
Educational program code and title	6B06105 «Information System»
Year, semester	3 year, 5 semester
Subject category	elective
Number of credits (ECTS)	5
Prerequisites:	OER 3303 Fundamentals to SAP ERP (ERP-1)
Postrequisites	Production Planning (ERP 3)
Lecturer	Karimzhan Nurlan Berlibekuly, senior lecturer, MSIT in eBiz Technology <a href="mailto:nkarimzhan@gmail.com">nkarimzhan@gmail.com</a> , office 107, office days: Tue 12:00-13:00 and Thu 12:00-13:00
Instructors	
<b>2. Goals, objectives and learning outcomes of the course</b>	
<b>The course goal is</b>	
To give students an idea of the ABAP programming language, which is still one of the most important in the SAP world languages. As the business logic of the programming level. Knowing ABAP means understanding the business logic in SAP and Business Informatics qualifies students to understand the behavior of the SAP system. In addition, students can use this knowledge to enhance the SAP software on their own to meet the new needs of the business instantly.	
<b>The objectives of the course are</b>	
The successful development of ABAP SAP development language provides the following benefits:	
<ul style="list-style-type: none"> <li>• Opens a new way to build a career.</li> <li>• Give you a significant help to get SAP Certification</li> <li>• Solves fully future challenges in the design.</li> <li>• Allows you to gain a competitive advantage in tense situations.</li> <li>• Increase and improve your credibility as a professional and business staff.</li> <li>• Training.</li> <li>• With Sap certification can be found all over the world, and more specifically the area of your expertise.</li> <li>• Comprehensive training program will provide you with excellent material and flexible business approach.</li> <li>• One of the best self-assessment methods.</li> <li>• Check the efficiency of your work and knowledge of the</li> <li>• Dual level of certification will help you to improve at the same time</li> <li>• Career</li> <li>• Gain knowledge promotional</li> <li>• Socialization with the business community.</li> <li>• satisfaction in itself and supports their skills at a high level.</li> </ul>	
<b>Learning outcomes of the course</b>	
By the end of the course the students will be able to do the following relative to a wide range of topics:	
<ol style="list-style-type: none"> <li>1. To identify the types of items.</li> <li>2. To solve problem of calculation salary of workers.</li> <li>3. To work in SAP ERP GUI</li> <li>4. To explain work as SAP user in role of accountant</li> <li>5. To compare and contrast the different ways of creating item profiles in SAP ERP</li> </ol>	
<b>3. Course description</b>	
Language development of SAP - ABAP continues to be one of the most important in the SAP world languages. As the business logic of the programming level. Knowing ABAP means understanding the business logic in SAP and Business Informatics qualifies students to understand the behavior of the SAP system. In addition, students can use this knowledge to enhance the SAP software on their own to meet the new needs of the business instantly. This course is a very good starting point for lectures, who want to get inside knowledge of the SAP system and	

want to learn ABAP. The aim of the course is to deliver the basic concepts of the ABAP. Lecture attending this seminar are trained to create new SAP software, custom dialogs and database access.

#### 4. Course policy

##### Students are forbidden to:

- submit any tasks after the deadline. Late submissions are graded down.
- cheat. Plagiarized papers shall not be graded;
- be late for classes. Being tardy three times amounts to one absence;
- retake any tests, unless there is a valid reason for missing them;
- use mobile phones in class;
- chew gum in class.

##### Students should always

- be appropriately dressed (formal/semi-formal styles are acceptable);
- show consideration for and mutual support of teachers and other students;
- let the teacher know of any problems arising in connection with their studies.

During classes students can use online platforms like MS teams, Zoom, DL, etc.

#### 5. Literature

##### Basic literature:

1. Greenwood, K. (1998). Sams Teach Yourself ABAP / 4 in 21 Days. ISBN-13: 978-0672312175.
2. «Introduction to ABAP», Methodical instructions for practical exercises, NM Golovin, AN Ambrazhey, SPb.: Publishing. Polit. Univ., 2010, OPD.F.06, OPD.F.10.
3. Video course materials in dl.iitu.kz/11742 Introduction to SAP programming on ABAP (ERP2) 2020-2021/1 and <https://teams.microsoft.com/l/team/19%3aebc0b47e8cb04b1284740b90a75dbd74%40thread.tacv2/conversations?groupId=0578b085-c045-43ce-865a-3e18e8354ad1&tenantId=70c1157a-941c-4b39-98e6-a0634f2759e7>.

##### Online resources:

1. <http://www.sapnet.ru/abap21day> (Sams Teach Yourself ABAP/4 in 21 Days)
2. <http://scn.sap.com/community/uac> (SAP Univeristy Alliances)
3. <http://www.acc-sap.ru> (ACC)

#### 6. Course schedule

##### Lecture, practical/seminar/laboratory session plans

#	Abbreviation	Meaning
1	TSIS	Teacher-supervised independent work (CPCII)
2	SIS	Students' independent work (CPC)
3	IP	Individual project
4	PA	Practical assignment
5	LW	Laboratory work
6	MCQ	Multiple choice quiz

Week No	Course Topic	Reference Materials	Lectures (1 h/w)	Practical sessions (h/w)	Lab. Session	TSIS (1 h/w)	SIS (6 h/w)
1	Introduction and the first program	[1], [4], [5]	1	-	2	1	6
2	Development Tools Environment	[1], [2], [3], [4],[5], [6]	1	-	2	1	6

3	Basic principles of ABAP-programming	[1], [2], [5], [6],[7]	1	-	2	1	6
4	User input control structures and	[1], [2], [3], [4],[5], [6]	1	-	2	1	6
5	Job database	[1], [4],	1	-	2	1	6
6	Using domain reference and data elements meaningfully	[1], [2], [3], [4],[5], [6]	1	-	2	1	6
7	Dynamic program	[1], [2], [3], [4],[5], [6]	1	-	2	1	6
8	Creating a second screen	MCQ + Practical Exercises	1	-	2	1	6
9	Features of ERP-systems	[1], [2], [3], [4],[5], [6]	1	-	2	1	6
10	ABAP Objects and the Business Server Pages	[1], [2], [3], [4],[5], [6]	1	-	2	1	6
11	Using the BAPI to the business server page (BSP)	[1], [2],[3], [4],[5], [6]	1	-	2	1	6
12	Using the MVC-pattern	[1],[4],[5], [6],[8]	1	-	2	1	6
13	Sub-screen, tab and HTML viewer	[1],[4],[5], [6]	1	-	2	1	6
14	Using external URL	[1],[4],[5]	1	-	2	1	6
15	Exception Handling	[1], [2], [3], [4],[5]	1	-	2	1	6
	<b>Total hours</b>	<b>150</b>	<b>15</b>	<b>-</b>	<b>30</b>	<b>15</b>	<b>90</b>

### 7. List of assignments for Student Independent Study

№	Assignments (topics) for Independent study	Hours	Recommended literature and other sources (links)	Form of submission	Deadline of submission
1	2	3	4	5	6
1	Getting Started With Your System	1	[1],[2],[3], [4],[5], [6]	Discussion	Week 2
2	Writing the first program in the ABAP: "Hello World!"	1	[1],[2],[3], [4],[5], [6]	Discussion	Week 3
3	Development Tools Environment	1	[1],[2],[3], [4],[5], [6]	Discussion	Week 4
4	Help System ABAP	1	[1],[2],[3], [4],[5], [6]	Discussion	Week 5
5	Debugging code	1	[1],[2],[3], [4],[5], [6]	Discussion Discussion	Week 6
6	Basic principles of ABAP-programming	1	[1],[2],[3], [4],[5], [6]	Discussion	Week 7
7	User input control structures and	1	[1],[2],[3], [4],[5], [6]	Discussion	Week 8
8	Functional calculation unit	1	[1],[2],[3], [4],[5], [6]	Discussion	Week 9
9	Job database	1	[1],[2],[3], [4],[5], [6]	Discussion	Week 10

10	Read and display data from the table	1	[1],[2],[3], [4],[5], [6]	Discussion	Week 11
11	Using domain reference and data elements meaningfully	1	[1],[2],[3], [4],[5], [6]	Discussion	Week 12
12	Dynamic program	1	[1],[2],[3], [4],[5], [6]	Discussion	Week 13
13	Dynamic Program: Creating a second screen	1	[1],[2],[3], [4],[5], [6]	Discussion	Week 14
14	Dynamic Applications: Handling of variables	1	[1],[2],[3], [4],[5], [6]	Discussion	Week 15
15	Dynamic Program: Instruction CASE	1	[1],[2],[3], [4],[5], [6]	Discussion	

### 8. Student performance evaluation system for the course

Period	Assignments	Number of points	Total
1 <sup>st</sup> attestation	Attendance, Laboratory works, Quizzes and Midterm	100	30
2 <sup>nd</sup> attestation	Attendance, Laboratory works, Quizzes and Midterm	100	30
Final exam	Exam	100	40
<b>Total</b>	<b>0,3*1stAtt+0,3*2ndAtt+0,4*Final</b>		<b>100</b>

\*If the number of absences exceeds 20%, student will be automatically scheduled for a Retake (summer semester)

### 9. Criteria for evaluation

- Each course assignment (Midterm, EndTerm, created Program, Test) is rated from 0 to 100 points.
- If the task consists of several questions, then the answer to each question of this task is assessed as "100 divided by the number of questions in the task" – the maximum score for each question of this task. If the answer for a question is given in full - the maximum score for this question is set. If the answer is half given, the 50% of maximum score for this question is set, etc. Answers to questions should be given in full, the style of presentation - scientific.

Example1: Task 1 consists of 5 question. Each question cost  $100/5=20$  points.

Question 1=20 points

Question 2=10 points

Question 3=10 points

Question 4=20 points

Question 5=20 points

Task 1=80 points

- For 1<sup>st</sup> attestation and 2<sup>nd</sup> attestation (PK1 and PK2) of the course, control grade is calculated using a formula in which the weight of the grade for MidTerm or EndTerm is higher than the weight of the sum for rest of the assignments.

Example2:  $PK1=40\%(\text{Average value of}(\text{Test 1}+ \text{Test 2}+ \text{Test 3}+ \text{Test 4}+ \text{Test 5}+\text{Mark for Program}))+ 60\%(\text{MidTerm})$

$PK1=40\%(\text{Average value of}(89+ 95+ 100+ 85+ 80+95))+ 60\%(95)=36+57=93$

Or an average mark for all tasks during that part of course is set.

$PK2=\text{Average value of}(\text{Task 1}+ \text{Task 2}+ \text{Task 3}+\text{Test 1}+ \text{Test 2}+ \text{Mark for Program}+\text{EndTerm})$

$PK2=\text{Average value of}(85+ 80+ 100+100+ 95+ 93+90)=92$

### 10. Letter grade numerical equivalent table

Achievement level as per course curriculum shall be assessed according to the evaluation chart adopted by the academic credit system:

Letter Grade	Numerical equivalent	%	Grading scheme
--------------	----------------------	---	----------------

A	4,0	95-100	«Excellent»
A-	3,67	90-94	
B+	3,33	85-89	«Good»
B	3,0	80-84	
B-	2,67	75-79	
C+	2,33	70-74	«Satisfactory»
C	2,0	65-69	
C-	1,67	60-64	
D+	1,33	55-59	
D	1,0	50-54	
F	0	0-49	
			F (0-24) «Fail»

### 11. Methodological guidelines

Assessment is administered continuously throughout the course. The students are rated against their performance in continuous rating administered throughout the semester (credited 60%) and summative rating done during the examination session (credited 40%), total 100%. Continuous rating is students' on-going performance in class and independent work. Class work is assessed for attendance, laboratory works' defense and in- class assessments.

TSIS (Teacher Supervised Student Independent Study) -comprises presentation to be done by students independently and checked by instructor.

Mid-term and End-term is a review of the topics covered and assessment of each student's knowledge.

Final assessment is a combination of both written exam and project to evaluate the students' academic performance and professional skills.

### 12. Assessment and evaluation materials (exam questions)

// Начало вопроса: ВопрМножВыбор

Where can you see the Tcode for the screen in the SAP window {

- ~In the menu bar
- ~In the status field of the status bar
- ~Using system -> status menu
- ~All of the above

}

// Начало вопроса: ВопрМножВыбор

Which of the following provides general information on the SAP system and transaction or task on which you are working? {

- ~Status bar
- ~Menupath
- ~Rolebar
- ~None of the above

}

// Начало вопроса: ВопрМножВыбор

Which is not a type of RFC Call {

- ~Synchronous
- ~Transactional
- ~Asynchronous
- =All the above

}

// Начало вопроса: ВопрМножВыбор

Buffering can be good for which type of table {

- ~When a table is read infrequently
- ~When a table is read frequently and the data is always changing

~When a table is read frequently and the data seldom changes  
~When a table is linked to check tables  
}  
// Начало вопроса: ВопрМножВыбор  
This SAP product is the foundation for SOA in an enterprise {  
~SAP XI  
~SAP BI  
~SAP Netweaver  
~none of the above  
}  
// Начало вопроса: ВопрМножВыбор  
What addition to the read table statement must be used when reading a hashed or sorted internal table to ensure that a binary search will be used? {  
~WITH KEY  
~WITH TABLE KEY  
~WHERE  
~None of the above  
}  
// Начало вопроса: ВопрМножВыбор  
What is the architecture of SAP R/3? {  
// Начало вопроса: ВопрМножВыбор  
How many database servers can be present in a SAP R/3 system? {  
~Multiple  
~One and only one  
~At least one  
~depends on number of application servers  
~None of these  
}  
// Начало вопроса: ВопрМножВыбор  
Background jobs can not be scheduled periodically {  
~Using a given frequency  
~Based on status of another job  
~Based on a event  
=None of the above  
}  
// Начало вопроса: ВопрМножВыбор  
A GUI status is composed of which of the following? {  
~Menu Bar and Checkboxes  
~Menu Bar, Tool Bar, and Checkboxes  
~Tool Bar and Checkboxes  
~Menu Bar, Tool Bar, and Title  
}  
// Начало вопроса: ВопрМножВыбор  
Internal table can be of type: {  
~Standard  
~Sorted  
~Hashed  
~All of the above  
}  
// Начало вопроса: ВопрМножВыбор  
The system performance is affected by the following {  
~The number of users active in the system



~The activities of these users  
~how much data is being addressed  
=all of the above  
}  
// Начало вопроса: ВопрМножВыбор  
Which one of the following is true about the access costs for a sorted internal table {  
~Increases linearly  
=Increases logarithmically  
~Is constant  
~None of the above  
}  
// Начало вопроса: ВопрМножВыбор  
SORT statement can sort {  
~external as well as internal table  
~only database table  
~only internal table  
}  
// Начало вопроса: ВопрМножВыбор  
You have added an append structure to a standard SAP table. What happens to the standard table when a new version of the table is imported during an upgrade? {  
~The standard table is returned to standar Therefore, the append structure must be manually re-applied  
=When the standard tables are activated, the append structure is automatically appended to the standard table  
~The append fields are automatically appended to the table upon activation but you must still convert the table  
~All append structures are delete A new append structure must be created and then appended to the standard table  
}  
// Начало вопроса: ВопрМножВыбор  
Which of the project phase is most important from process design and definition perspective {  
~Realization  
~Project Preparation  
~Blueprint  
~Acceptance testing  
}  
// Начало вопроса: ВопрМножВыбор  
It is possible to protect a variant from changes by other users {  
=True  
~False  
}  
// Начало вопроса: ВопрМножВыбор  
How many dialog steps in an SAP Transaction {  
=At least One  
~Only One  
~One for every transaction in the SAP LUW  
~One for every explicit database commit  
}  
// Начало вопроса: ВопрМножВыбор  
What is needed to ensure a check field is verified against the referenced key field of the check table {  
~same data type only is required for check field and referenced field  
=same domain is required for check field and referenced field  
~same data element is required for check field and referenced field  
~all key fields MUST have domain equality between check table and foreign key table  
}

// Начало вопроса: ВопрМножВыбор  
A Tabstrip control consists of the following elements except {  
~Scroll bar  
~Tab title  
=Subscreen  
~None of the above  
}  
// Начало вопроса: ВопрМножВыбор  
What is the ABAP Dictionary being used for? {  
~ Defining database objects, e.g. Tables and Views on the Database  
~ Maintaining ABAP programs  
~ Maintaining Documentation  
~ Maintaining help files  
}  
// Начало вопроса: ВопрМножВыбор  
Menu bar will have the following menus by default when created {  
~File, help  
~Edit, Help  
~Window, System  
=None of the above  
}  
// Начало вопроса: ВопрМножВыбор  
Which of the following is correct in the case of READ with BINARY SEARCH on a standard internal table {  
~ The internal table needs to be sorted using the key fields  
~ The internal table need not be sorted  
~ The internal table needs to be sorted using the fields in sequence as used in BINARY SEARCH  
~ None of the above  
}  
// Начало вопроса: ВопрМножВыбор  
If you want to display technical names for the respective tasks you can do this using the following tab in the menu bar {  
~System  
~Extras  
~Favorites  
}  
// Начало вопроса: ВопрМножВыбор  
Where is the Permanent data (e.g. Customizing setting, Master data, Transaction data) usually stored in an R/3 system? {  
=Database tables(Missed)  
~Data Elements  
~Domains  
~ABAP Objects  
}  
// Начало вопроса: ВопрМножВыбор  
What is the transaction code for the ABAP Editor {  
~ se11  
~ se38  
~ se36  
~ se14  
}  
// Начало вопроса: ВопрМножВыбор  
SAP Best Practices are the sound foundation for pre-packaged ready-to-use business solutions {

```
=True
~False
}
// Начало вопроса: ВопрМножВыбор
Following data types are present in ABAP 4 {
= char
~ alpha numeric
~ decimal
~ varchar
}
// Начало вопроса: ВопрМножВыбор
Language for SAP menu in the transaction depends on {
~ Setting in user master
~ Language selected during login
~ Selection in the transaction
~ all of the above
}

// Начало вопроса: ВопрМножВыбор
What can be assigned directly to a data element {
~ Table type
= Built-in type
~ Table field
~ Check table
}
// Начало вопроса: ВопрМножВыбор
While debugging you can assign a new value to a variable {
= True
~ False
}
// Начало вопроса: ВопрМножВыбор
You can use the F1 help to {
= Display an explanation of a field's uses
~ Display a list of possible input values
~ End the session you are in
~ Change the logon language
}
// Начало вопроса: ВопрМножВыбор
In modifying an internal table it is always better to use field symbols than using work are {
= True
~ False
}
// Начало вопроса: ВопрМножВыбор
ABAP syntax is platform independent because {
= ABAP runtime system is a component of SAP WAS
~ ABAP is Object oriented
~ ABAP is typed
~ ABAP uses open SQL
}
// Начало вопроса: ВопрМножВыбор
The following are some of the ABAP data types except {
~ T
```

```
~I
~X string
=A
}
// Начало вопроса: ВопрМножВыбор
The following are some keywords to define data type/objects except {
=     TYPE
~     STATICS
~     CONSTANTS
~     TABLES
}
// Начало вопроса: ВопрМножВыбор
Hashed table access using      I. Only Index      II.. Only Unique Key      III. Only Non-unique
Key      III. Both Unique and Non-Unique Key {
~     I only
=     II only
~     III only
~     I and II
}
// Начало вопроса: ВопрМножВыбор
The operation that cannot be done on a sorted table is {
~     Insert
~     Modify
=     Append
~     Read
}
// Начало вопроса: ВопрМножВыбор
The key word that releases the memory of an internal table is {
~     Clear
~     Refresh
=     Free
~     Refresh[]
}
// Начало вопроса: ВопрМножВыбор
For a Internal table with header line, the key word that clears only the header line is {
=     Clear
~     Refresh
~     Free
~     Clear[]
}
// Начало вопроса: ВопрМножВыбор
Given the statement, DO. Write. /1 'E equals MC square' ENDDO. Will result in {
~     Output of 'E equals MC square' on a new line one time
=     An endless loop that results in an ABEND
~     Output of 'E equals MC square' on the same line many times
~     e. Loop that will end when the user presses ESC
}
// Начало вопроса: ВопрМножВыбор
The following code indicates all of the following except. DATA. counter type i. CLEAR counter. DO. counter
\= counter + 1. IF counter >|= 5. Exit. ENDIF. ENDDO. WRITE: /1 counter. {
=     Start a loop
~     Increment counter until it is 5 or more.
```

```
~      Execute the code between DO and ENDDO five times.
~      Exit the program if counter is 5 or more.
}
// Начало вопроса: ВопрМножВыбор
What value must ch_field contain so that "Nice job!" will be output? Write: /1 'Nice'. CHECK ch_field NE
'X'. Write. 'Job!' {
~      'X'
~      Anything other than 'X'
~      "Nice job!" will not be output by this code
~      None of the above
}
// Начало вопроса: ВопрМножВыбор
Which keyword removes any line from an internal table? {
~      ERASE
~      MODIFY
~      STRIP
~      DELETE
}
// Начало вопроса: ВопрМножВыбор
To sort data as you select it, use {
~      INTO TABLE
~      SORT BY
~      ORDER BY
~      None of the above
}
// Начало вопроса: ВопрМножВыбор
By definition, what fields make up the standard internal table key? {
~      All the table's fields.
=      All the non-numeric fields.
~      All the numeric fields.
~      The first field
}
// Начало вопроса: ВопрМножВыбор
Which of these ABAP statements does NOT declare an internal table? {
~      DATA. BEGIN OF itab OCCURS 0, field(10) TYPE c, END OF ita
~      DATA. itab LIKE struc OCCURS 10 WITH HEADER LINE.
=      DATA. BEGIN OF itab WITH HEADER LINE, field(10) TYPE c, END OF itab
~      DATA. itab TYPE STANDARD TABLE OF struc_type.
}
// Начало вопроса: ВопрМножВыбор
The table control attribute <ctrl>-LINES indicates the total number of lines in the internal table. {
~True
=False
}
// Начало вопроса: ВопрМножВыбор
Statement "Continue" inside a LOOP AT ITAB...ENDLOOP will {
~      Come out of the loop and process the next statement
~      Go to the next loop process
~      Will continue processing the next statement
~      None of the above
}
// Начало вопроса: ВопрМножВыбор
```

Statement "EXIT" inside a LOOP AT ITAB...ENDLOOP will {

- ~ Come out of the loop and process the next statement
- ~ Go to the next loop process
- ~ Will continue processing the next statement
- ~ None of the above

}  
// Начало вопроса: ВопрМножВыбор

Statement "RETURN" inside a function module will {

- ~ Processing will be stopped and take the control back to the calling program
- ~ If inside a loop will return to the next loop
- ~ Will continue processing the next statement
- ~ None of the above

}  
// Начало вопроса: ВопрМножВыбор

User defined data types that can be created in ABAP Dictionary are I. Data element II. Structure III. Domain IV. Table type {

- ~ I and II only
- ~ I and III only
- ~ I, II and III only
- = I, II and IV only

}  
// Начало вопроса: ВопрМножВыбор

Domain has the following characteristics except {

- ~ Data type
- ~ Conversion routine
- ~ Value table
- = Field Label

}  
// Начало вопроса: ВопрМножВыбор

In the following statements about dictionary objects, only one is correct {

- ~ Structure cannot be included in transparent table
- ~ Structure cannot be included in structure
- = Transparent table can be included as an entire table
- ~ Transparent table can be included in structure

}  
// Начало вопроса: ВопрМножВыбор

While creating a table, reference table and reference fields are required for table fields of the following type {

- ~CUKY
- =QUAN
- ~INT4

}