

Topic: Programming algorithms of  
spinning

Class: 7



# "Unlock!" game

What is an algorithm?

What is a linear algorithm?

How many parts do the program consist of in Pascal?

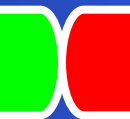
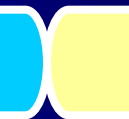
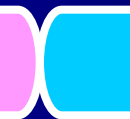
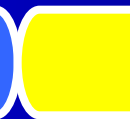
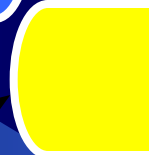
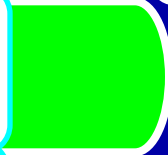
Example of a linear algorithm

Who has provided Pascal programming language?

What is the word CONST in the program?

The last and main part of the program

How many types of algorithms do you have?



# Types of algorithms



Linear or serial  
algorithm

Cyclic or repeating  
algorithms

Spell-checking or  
conditional algorithms

# *Linear algorithm*

- The linear algorithm is the algorithm for each and if all of them are bread to the end, sequentially one after the other performance.

# Cyclic algorithm

Most algorithms are definite actions The chain is repeated several times Part of the calculation process Repeated execution is called cycles

# Branching algorithm

The sequence of steps is called algorithms of algorithms branching, which depends on some conditions.



## Бағдаршамнан өту

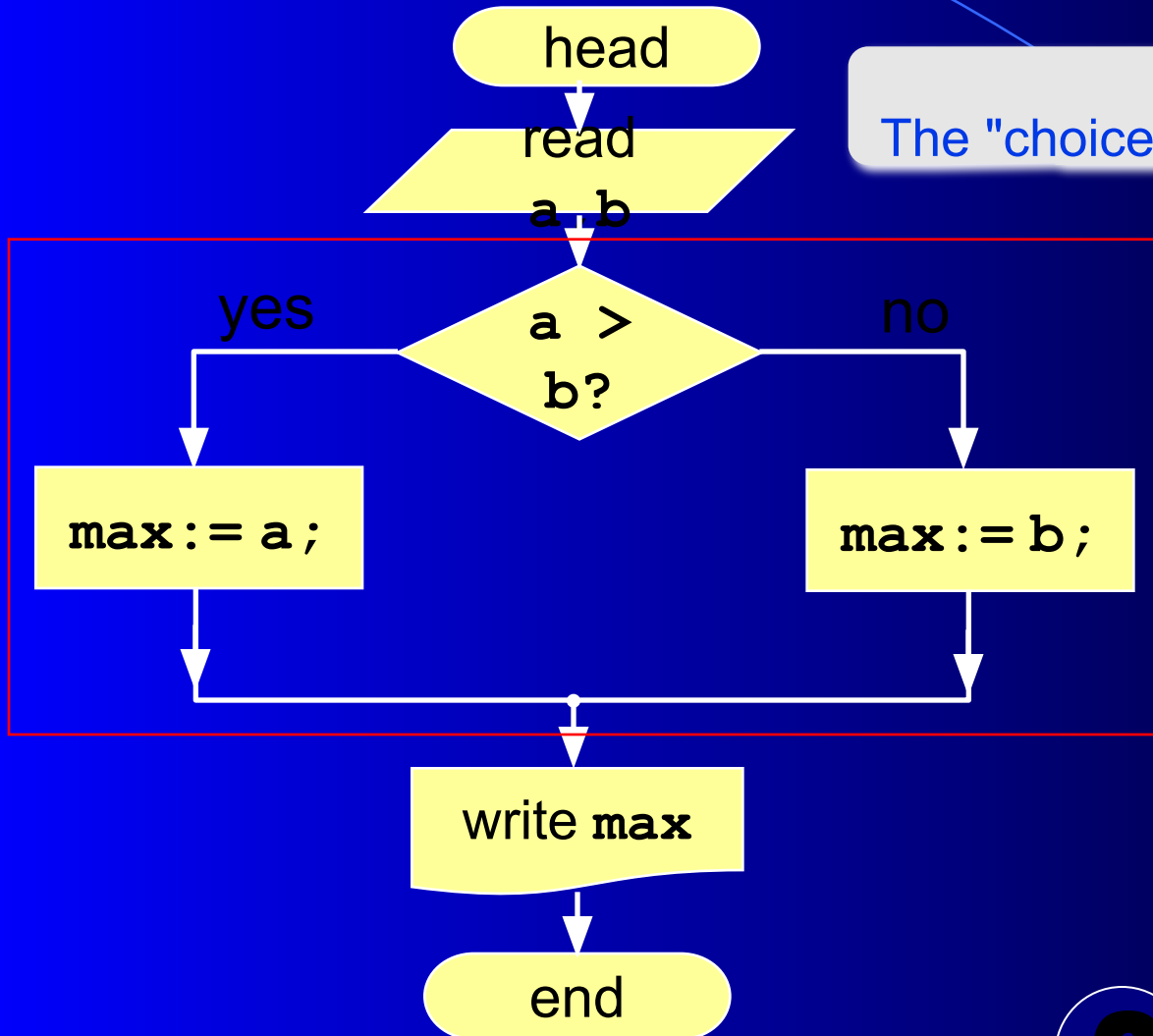
1. Бағдаршамға қарау
2. Егер қызыл жанса онда тоқта
3. Егер сары жанса онда дайындал
4. Егер жасыл жанса онда жүр



Example 1. Enter two integers and release them in the screen. Removal method: If the first digit is greater than the second number, the first one, and if the least is the second one.

Specific: The action of the executive depends on the performance of certain conditions (otherwise ... otherwise ...).

# Block diagram



The "choice" block

Complete bundle  
type



if  $a = b$ ?

# Software

```
program qq;  
var a, b, max: integer;  
begin  
  writeln('Екі бүтін сан енгізіз');  
  read ( a, b );  
  if a > b then begin  
    max := a;  
  end  
  else begin  
    max := b;  
  end;  
  writeln ('Екі санның үлкені', max);  
end.
```

шартты  
оператордың  
толымды түрі

# Conditional operator

```
if < contract > then begin  
    { what to do if the condition is met }  
end  
else begin  
    { What to do if the condition is not met }  
end;
```

**Specifications:** else should not have semicolons before else the second part (else ...) may also be absent (full type) If there is only one operator in the block, you can also skip the start and end words

# Where's the wrong place?

```
if a > b then begin
  a := b;
end
else begi
  b := a;
end;
```

```
if a > b then begin
  a := b; end
else begin
  b := a;
end;
```

```
if a > b then begin
  a := b;
end
else begin
  b := a;
end;
```

```
if a > b then begin
  a := b;
end
else begin
  b := a;
end;
```

## REPORTING, RESULTS IN PASCAL

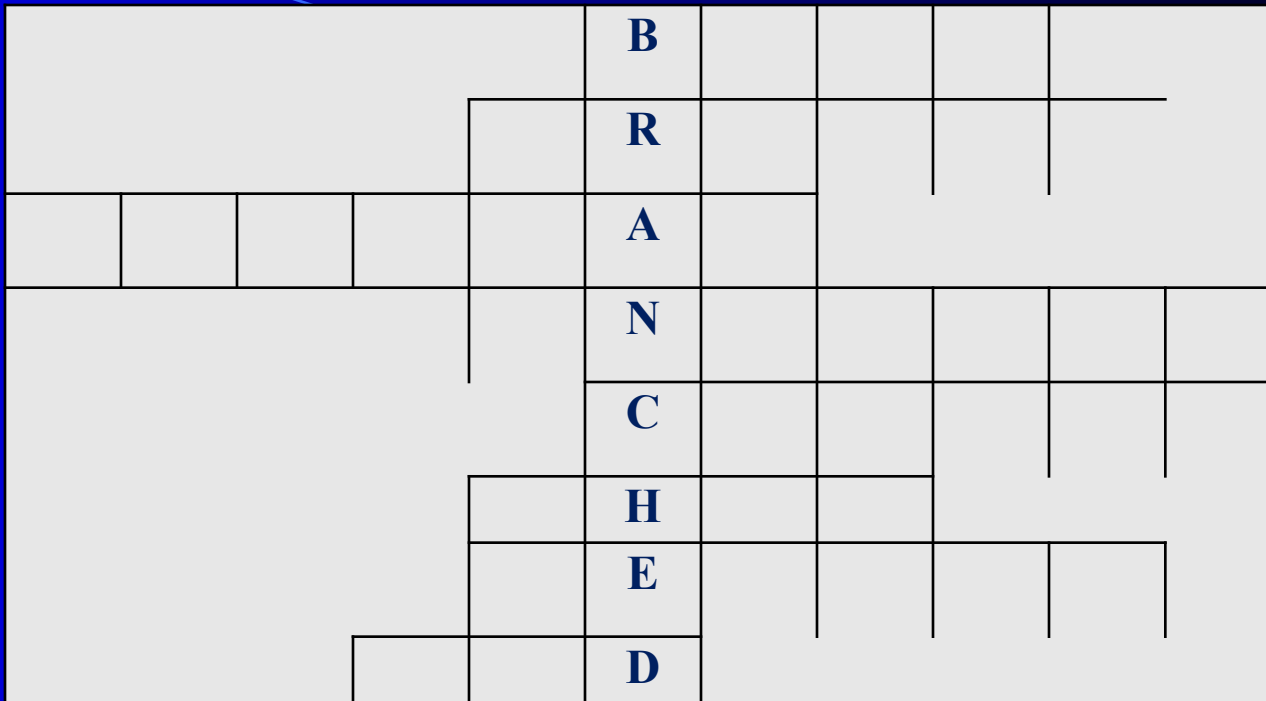
Task Take out the report and set the pascal.

Find two numbers and find them.

Example: enter two numbers: 15 9

ANSWER: 9

# Wormwood



1. The beginning of the main program
2. Release operator
3. Title of the program
4. The type of an integer
5. An algorithm that does not change the value of a value
6. Symbolic value
7. Input operator
8. End of the program

## Answers:

- 1.Begin
2. Write
3. program
4. integer
5. const
6. char
7. Readln
- 8.End



# Refreshing Moment to Spreading Algorithm

1. If you do not work, .....
2. If you are not satisfied with everything, then  
.....
3. If you do both work simultaneously,  
.....

# Resolve the rebounds



# Test tasks

1. Where did the name "Algorithm" come from?

A) Mohammed al-Khwarizmi's Latin alphabet B) Mohammed al-Khwarizmi's name in Arabic C) Al-Farabi's Latin alphabet

2. What is an algorithm? A) Various phenomena occurring in the environment B) the Contractor's achievement of a certain purpose precise definition, action, which is executed in sequence. C) Work using the information given first

3. What geometric shapes do not apply in the block diagram? A) rectangle, rhombus B) arrows, parallelograms C) a circle, a triangle

4. Are the teams executed algorithm one by one? A) linear B) cyclic C) branched

5. What is the graphical expression of the algorithm? A) Program B) Dictionary C) Block diagram

Answers:

1	2	3	4	5
A	Б	В	A	В

## VII. Қорытындылау. Рефлексия



# Homework

1. Enter two integers and release them in the screen.
2. Creating an example of your own thoughts and creating an algorithm.