

TD

- 1 Read a last name and first name from a user. Then display a phrase as follows:

Var last_name, first_name : sequence of character

Begin

write ("What is your last_name? ")

read (last_name)

write ("What is your first_name? ")

read (first_name)

write ("Welcome", last_name, first_name, "!")

End

- 2 Read a number from a user and calculate square of that number then display its result.

Var number : Integer

Begin

write ("Enter a number: ")

read (number)

write ("The square of", number, "is...")

End

3. Read two numbers (say n_1 and n_2) from a user then display their summation, subtract, and multiplication.

Var n_1, n_2 : integer

Var first_number, second_number : integer

Begin

write ("Enter the first_number: ")

read (first_number)

write ("Enter the second_number: ")

read (second_number)

write ("The summation of", n_1 , "and", n_2 , "is: ---")

write ("The subtraction of", n_1 , "and", n_2 , "is: ---")

write ("The multiplication of", n_1 , "and", n_2 , "is: ---")

write ("The division of", n_1 , "and", n_2 , "is: ---")

End

4. A program to ask user for first name, last name and department. Then display message:

Var first_name, last_name : sequence of character

Var department : sequence of character

Begin

write ("What is your first name? ")

read (first_name)

write ("What is your last name? ")

read (last_name)

write ("Which department are you from? ")

read (department)


```
write ("welcome to department, lastname firstname!")
```

End

5. Ask a user to input height and base of a triangle. Calculate the surface of this triangle and display.

```
Var height, base : integer float
```

```
Var surface : float
```

Begin

```
write ("The height of a triangle: ")
```

```
read ( height)
```

```
write ("The base of a triangle: ")
```

```
read ( base)
```

```
S ← 0.5 ( height * base)
```

```
write ("So that the surface is", S)
```

End

6. Ask a user for a, b and c length of a triangle. Calculate its surface using heron formula.

```
Var a, b, c : float
```

```
Var S, p : float
```

Begin

```
write ("a is the length of a triangle ")
```

```
read ( a)
```

```
write ("b is the length of a triangle ")
```

```
read ( b)
```

```
write ("c is the length of a triangle ")
```

```
read ( c)
```

$$p \leftarrow 0.5(a+b+c)$$

$$s \leftarrow \text{squareRoot}(p * (p-a) * (p-b) * (p-c))$$

write ("so that the surface is", s)

End