

# Benha University Faculty of Engineering Electrical Engineering Department

Semester • (1st year)

Computer Programming (a) - E1123

Semester 2020- 2021



# Lab. (10&11) Functions

# Answer the following questions

#### **Question One:**

Write a C++ program to find the square of any number using function.

## **Question Two:**

Write a program in C++ to swap two numbers using function.

#### Question Three:

Write a program to check a given number is even or odd using function.

#### **Question Four:**

Write a program using function which accepts two integers and character (operator) as an argument and return its results based on the operator (+, -, /, \*). Call this function from main () and print the results in main ().

# **Question Five:** Trace and find the following programs output

1)

```
1 #include <iostream.h>
2 int return7()
3 {
4 return 7;
5 }
6 int return9()
7 {
8 return 9;
9 }
10
11 int main()
12 {
13 cout << return7() + return9() << endl;
14
15 return 0;</pre>
```

```
2)
1 #include <iostream.h>
 3 int multiply(int x, int y)
5 return x * y;
 6 }
 7 int main()
9 cout << multiply(4, 5) << endl;
10 return 0;
11 }
   3)
1 #include <iostream.h>
3 void multiply(int x, int y)
5 return x * y;
6 }
7 int main()
9 cout << multiply(4, 5) << endl;</pre>
10 return 0;
11 }
12
   4)
1 #include <iostream.h>
2 int add(int a, int b);
3 int main()
4 {
5 int i = 5, j = 6;
6 cout << add(i, j) << endl;
7 return 0;
8 }
9 int add(int a, int b)
10 {
11 int sum = \underline{a} + \underline{b};
12 a = 7;
13 return <u>a</u> + <u>b</u>;
14 }
```

#### **Question Six:**

Write a C++ program that reads a set of integers and then prints the sum of the even numbers using function.

#### Question Seven:

Write a C++ program to Find Smallest Number using Function

# **Question Eight:**

Write a C++ program to Compute quotient and remainder of a number using function

# **Question Nine:**

Write a C++ program to Check Vowel or a Consonant character using function

### Question Ten:

Write a C++ program to Find All Roots of a Quadratic Equation using function

$$X = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$