



Sheet 5

Functions

Problem1

Write a c++ function that prints "Alslam Alikm" Message on screen.

Sample output:

```
Alslam Alikm!
```

Problem2

Write a c++ function called pow() to raise any number X to power N.

Sample output:

```
Enter X: 2
Enter N: 4
2^4 = 16
```

Problem3

Write a c++ program using function to find all roots of a Quadratic Equation.

Sample output:

```
Enter coefficients a, b and c: 1
2
1
x1 = x2 = -1

Enter coefficients a, b and c: 4
5
1
x1 = -0.25
x2 = -1

Enter coefficients a, b and c: 2
4
10
x1 = -1+2i
x2 = -1-2i
```

Problem4

Write a c++ function that takes 3 float numbers and return the smallestone.

Sample output:

```
Enter the first number: -10.4
Enter the second number: 4.3
Enter the third number: -23
The smallest number: -23
```

Problem5

Write a c++ function that takes a number, a basic math operator (+, -, *, /, ^), and a second number all from user input, and then return the result of the mathematical operation. You can Update program from sheet3.

Sample output:

```
Enter the first number: 2
Enter the second number: 4
choose the operator (+, -, *, /): *
2 * 4 = 8
```

Problem6

Write a c++ function that calculate the factorial of a number n entered by the user.

Problem7

Write a c++ function that finds the Fibonacci sequence of any number n. (Fibonacci Sequence is the series of numbers:0, 1, 1, 2, 3, 5, 8, 13, 21, 34, ...)