**C++ Functions**

A function is a block of code which only runs when it is called.

You can pass data, known as parameters, into a function.

Functions are used to perform certain actions, and they are important for reusing code: Define the code once, and use it many times.

**Create a Function**

C++ provides some pre-defined functions, such as main(), which is used to execute code. But you can also create your own functions to perform certain actions.

**Ex-1 create a function**

#include <iostream>

using namespace std;

void myFunction() {

cout << "I just got executed!";

}

int main() {

myFunction();

return 0;

}

**Ex-2// C++ Program to demonstrate working of a function**

#include <iostream>

using namespace std;

int max(int x, int y)

{

if (x > y)

return x;

else

return y;

}

int main()

{

int a = 10, b = 20;

int m = max(a, b);

cout << "The Bigger Number is " << m;

return 0;

}

**Ex-3// program to print a text**

#include <iostream>

using namespace std;

// display a number

void displayNum(int n1, float n2) {

cout << "The int number is " << n1;

cout << "The double number is " << n2;

}

int main() {

int num1 = 5;

double num2 = 5.5;

// calling the function

displayNum(num1, num2);

return 0;

}

Ex-4// program to add two numbers using a function

#include <iostream>

using namespace std;

// declaring a function

int add(int a, int b) {

return (a + b);

}

int main() {

int sum;

// calling the function and storing

// the returned value in sum

sum = add(100, 78);

cout << "100 + 78 = " << sum << endl;

return 0;

}

**Ex-5 square root of a number**

#include <iostream>

#include <cmath>

using namespace std;

int main() {

double number, squareRoot;

number = 25.0;

// sqrt() is a library function to calculate the square root

squareRoot = sqrt(number);

cout << "Square root of " << number << " = " << squareRoot;

return 0;

}

**Define a program to find out whether a given number is even or odd.**

#include<iostream>

using namespace std;

void eo(int x)

{

if (x%2 == 0)

cout << "Even\n";

else

cout << "Odd\n";

}

int main()

{

eo(4);

eo(5);

return 0;

}

**Ex-Swap the number**

#include<iostream>

using namespace std;

int main()

{

int num1;

int num2;

int temp;

cout << "Type value of number 1 :";

cin >> num1;

cout << "Type value of number 2 :";

cin >> num2;

temp = num1;

num1 = num2;

num2 = temp;

cout << "After swapping values" <<endl;

cout << "Value of number 1 :" << num1 << endl ;

cout << "Value of number 2 :"<< num2;

return 0;

}

**Maximum and Minimum Number**

**#**include <iostream>

using namespace std;

// function declaration

int max(int num1, int num2);

int main () {

// local variable declaration:

int a = 100;

int b = 200;

int ret;

// calling a function to get max value.

ret = max(a, b);

cout << "Max value is : " << ret << endl;

return 0;

}

// function returning the max between two numbers

int max(int num1, int num2) {

// local variable declaration

int result;

if (num1 > num2)

result = num1;

else

result = num2;

return result;

}

//multiplication with function

#include<iostream>

using namespace std;

int muliply(int num1, int num2, int outcome)

{

return(num1\*num2);

}

int main()

{

int x, y, product;

x = 10;

y = 5;

muliply(x,y,product);

}