Practical Lecture : Function

Quick Recap

Let’s take a quick recap of previous lecture –

A)

B)

C)

D)

E)

Today’s Agenda

Today we are going to cover -

- MCQ Question
- Coding Question

Let’s Get Started-

MCQ 1

1. Which of the following is the default return value of functions in C++?

a) int

b) char

c) float

d) void

MCQ 1

1. Which of the following is the default return value of functions in C++?

a) int

b) char

c) float

d) void

Answer: a
Explanation: C++ uses int as the default return values for functions. It also restricts that the return type of the main function must be int.

MCQ 2

What happens to a function defined inside a class without any complex operations (like looping, a large number of lines, etc)?

a) It becomes a virtual function of the class

b) It becomes a default calling function of the class

c) It becomes an inline function of the class

d) The program gives an error

MCQ 2

What happens to a function defined inside a class without any complex operations (like looping, a large number of lines, etc)?

a) It becomes a virtual function of the class

b) It becomes a default calling function of the class

c) It becomes an inline function of the class

d) The program gives an error

Answer: c
Explanation: Any function which is defined inside a class and has no complex operations like loops, a large number of lines then it is made inline.

MCQ 3

What is an inline function?

a) A function that is expanded at each call during execution

b) A function that is called during compile time

c) A function that is not checked for syntax errors

d) A function that is not checked for semantic analysis

MCQ 3

What is an inline function?

a) A function that is expanded at each call during execution

b) A function that is called during compile time

c) A function that is not checked for syntax errors

d) A function that is not checked for semantic analysis

Answer: a
Explanation: Inline function is those which are expanded at each call during the execution of the program to reduce the cost of jumping during execution.

MCQ 4

An inline function is expanded during _____

a) compile-time

b) run-time

c) never expanded

d) end of the program

MCQ 4

An inline function is expanded during _____

a) compile-time

b) run-time

c) never expanded

d) end of the program

Answer: a
Explanation: An inline function is expanded during the compile-time of a program.

MCQ 5

Which of the following feature is used in function overloading and function with default argument?

a) Encapsulation

b) Polymorphism

c) Abstraction

d) Modularity

MCQ 5

Which of the following feature is used in function overloading and function with default argument?

a) Encapsulation

b) Polymorphism

c) Abstraction

d) Modularity

Answer: b
Explanation: Both of the above types allows a function overloading which is the basic concept of Polymorphism.

Find the output

```
#include<iostream.h>

long BixFunction(int x, int y = 5, float z = 5)
{
   return(++x * ++y + (int)++z);
}
int main()
{
   cout<< BixFunction(20, 10);
   return 0;
}
```

Solution

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Find the output

```
#include<iostream.h>

int BixFunction(int a, int b = 3, int c = 3)
{
   cout<< ++a * ++b * --c ;
   return 0;
}
int main()
{
   BixFunction(5, 0, 0);
   return 0;
}
```

Solution

-6

Find the output

```
#include<iostream.h>
void MyFunction(int a, int b = 40)
{
    cout<< " a = "<< a << " b = " << b << endl;
}
int main()
{
    MyFunction(20, 30);
    return 0;
}
```

Solution

a = 20 b = 30

Find the output

```
#include<iostream.h>

static int b = 0;
void DisplayData(int *x, int *y = &b)
{
   cout<< *x << " " << *y;
}
int main()
{
   int a = 10, b = 20 ;
   DisplayData(&a, &b);
   return 0;
}
```

Solution

The program will print the output 10 20.

Coding Question

1.Write a program using function to find whether a number is Armstrong or not.

2.Write a program using function to find the sum and product of all elements in an array.

QNA Time

Any Questions ??

Any Questions??

Thank You!

See you guys in next class.