**Variable scopes**

1. **A) Global namespace scope ->** It is the outermost namespace scope of a program, in which objects, functions, types and templates can be defined.

**EXAMPLE:**

#include<iostream>

using namespace std;

// global variable

int global = 5;

// global variable accessed from

// within a function

void display()

{

cout<<global<<endl;

}

// main function

int main()

{

display();

// changing value of global

// variable from main function

global = 10;

display();

}

**B) Local scope->**A name declared within a function including the parameter have local scope. They are only visible from their point of declaration to the end of the functions

**EXAMPLE:**

// usage of local variables

#include<iostream>

using namespace std;

void func()

{

// this variable is local to the

// function func() and cannot be

// accessed outside this function

int age=18;

}

int main()

{

cout<<"Age is: "<<age;

return 0;

}

**C) Function-prototype scope ->** also known as function declaration. Terminates at the end of the nearest enclosing function declaratory.

**EXAMPLE:**

void draw\_circle ( );

int m ( ) ;

void print\_box (int) ;

int Rect\_area (int , int);

**D) Function scope->** It is visible throughout a function body even before its point of declaration

**EXAMPLE:**

#include <iostream>

using namespace std;

// Declare class Account at global scope.

class Account

{

public:

Account( double InitialBalance )

{ balance = InitialBalance; }

double GetBalance()

{ return balance; }

private:

double balance;

};

double Account = 15.37; // Hides class name Account

int main()

{

class Account Checking( Account ); // Qualifies Account as

// class name

cout << "Opening account with a balance of: "

<< Checking.GetBalance() << "\n";

}

//Output: Opening account with a balance of: 15.37

**FLOW CHART**

INPUT I’TH EXAM SCORE X

Print average

AVG = SUM/N

I = I + 1

SUM = SUM + X

IS

I > N ?

I = 1

N = 25

SUM = 0