**LAB 7**

**Objectives**

Introduce with arrays

**Task 1**

Write a program that contains one user defined function Message.

In main function you have to take name as input and print Hello name.

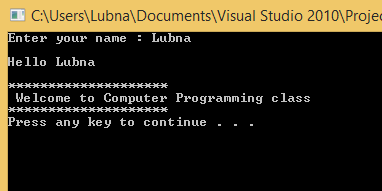
In Message function you have print following message.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Welcome to Computer Programming class

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**Output**



#include<iostream>

#include<string>

using namespace std;

void message ();

void main()

{

string name;

cout<<"Enter your name: ";

cin>>name;

cout<<"\n\t Hello "<<name<<endl;

message();

system ("pause");

}

void message()

{

cout<<"\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*"<<endl;

cout<<"Welcome to Computer Programming Class"<<endl;

cout<<"\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*"<<endl;

}

**Task 2**

Write a program that calculates the factorial of number provided by user using function.

#include<iostream>

using namespace std;

void factorial (int n);

void main(void)

{

int n;

cout<<"Enter number: ";

cin>>n;

factorial (n);

system ("pause");

}

void factorial (int n)

{

int fac=1,i,a;

cout<<"\n"<<n<<"! = "<<n;

i=n;

a:

fac=fac\*i;

i=i-1;

cout<<"\*"<<i;

if(i>1)

{

goto a;

}

else

{

cout<<endl;

cout<<n<<"! = "<<fac<<endl;

cout<<"\nFactorial of "<<n<<" is "<<fac<<endl;

}

}

**Task 3**

Write a program that finds whether the number provided by user is even or odd using function.

#include<iostream>

using namespace std;

void number (int n);

void main(void)

{

int n;

cout<<"Enter number: ";

cin>>n;

number (n);

system ("pause");

}

void number (int n)

{

if(n%2==0)

{

cout<<n<<" Number is Even"<<endl;

}

else

{

cout<<n<<" Number is Odd"<<endl;

}

}

**Task 4**

Write a C++ Program that contains five user defined function(s) plus(), minus(), multiply(), divide(),remainder

Take two integer number as input and perform addition subtraction multiplication division,remainder using functions

#include<iostream>

using namespace std;

void addition (int n1,int n2);

void subtraction (int n1,int n2);

void multiplication (int n1,int n2);

void division (float n1,float n2);

void reminder (int n1,int n2);

void main (void)

{

float n1,n2;

cout<<"Enter first number: ";

cin>>n1;

cout<<"Enter second number: ";

cin>>n2;

addition (n1,n2);

subtraction (n1,n2);

multiplication (n1,n2);

division (n1,n2);

reminder (n1,n2);

system("pause");

}

void addition(int n1,int n2)

{

cout<<"\n"<<n1<<"+"<<n2<<"="<<n1+n2<<endl;

}

void subtraction(int n1,int n2)

{

cout<<"\n"<<n1<<"-"<<n2<<"="<<n1-n2<<endl;

}

void multiplication(int n1,int n2)

{

cout<<"\n"<<n1<<"\*"<<n2<<"="<<n1\*n2<<endl;

}

void division(float n1,float n2)

{

cout<<"\n"<<n1<<"/"<<n2<<"="<<n1/n2<<endl;

}

void reminder(int n1,int n2)

{

cout<<"\n"<<n1<<"%"<<n2<<"="<<n1%n2<<endl;

}

**Task 5**

Write a C++ Program that contains one user defined function month().

In main() function: Read an integer input in between (1 to 12) and store it month\_of\_year. Call month(month\_of\_year)

In month() function: Print the corresponding month of year in month().

Example: Value of parameter is 4… Print “April”.

#include<iostream>

using namespace std;

void month (int n);

void main (void)

{

int n;

cout<<"Enter first number: ";

cin>>n;

month (n);

system("pause");

}

void month (int n)

{

if (n==1)

cout<<"Month of "<<n<<" is January"<<endl;

else if (n==2)

cout<<"Month of "<<n<<" is Febuary"<<endl;

else if (n==3)

cout<<"Month of "<<n<<" is March"<<endl;

else if (n==4)

cout<<"Month of "<<n<<" is April"<<endl;

else if (n==5)

cout<<"Month of "<<n<<" is May"<<endl;

else if (n==6)

cout<<"Month of "<<n<<" is June"<<endl;

else if (n==7)

cout<<"Month of "<<n<<" is July"<<endl;

else if (n==8)

cout<<"Month of "<<n<<" is August"<<endl;

else if (n==9)

cout<<"Month of "<<n<<" is September"<<endl;

else if (n==10)

cout<<"Month of "<<n<<" is October"<<endl;

else if (n==11)

cout<<"Month of "<<n<<" is November"<<endl;

else if (n==12)

cout<<"Month of "<<n<<" is December"<<endl;

else

cout<<"Invalid number"<<endl;

}