ASSIGNMENT NO 1 SOLUTIONS

(MADE BY ALI AKBER)

(BSCS IST REGULAR)

QNO1: Write a program that asks the user to type 5 integers and writes the average of the 5 integers.

```
#include <iostream>
#include <math.h>
using namespace std;

int main()
{
float n1,n2,n3,n4,n5, average;
cout<<"input 5 integers"<<endl;
cin>>n1>>n2>>n3>>n4>>n5;
average=(n1+n2+n3+n4+n5)/5.0f;
cout<<"Average is"<<average<<endl;
return 0;
}
```

QNO2: Write a program that asks the user to accept amount and discount from the user then display the payed amount.

```
#include <iostream>
#include <math.h>
using namespace std;

int main()
{
int amount, discount,payedamount;
cout<<"Input amount "<<endl;
cin>>amount;
cout<<"input discount"<<endl;
cin>>discount;
payedamount=amount-discount;
cout<<"payedamount is"<<payedamount<<endl;
}
```

QNO3: Accept two entry and then display arithmetic operation (+,-,*, /, %).

```
#include <iostream>
#include <math.h>
using namespace std;

int main()
{
int n1,n2,sum,sub,mult;
float div,mod;
cout<<"Enter two integers";
cin>>n1>>n2;
sum=n1+n2;
sub=n1-n2;
mult=n1*n2;
div=n1/n2;
mod=n1%n2;
cout<<"sum is"<<sum<<endl;
cout<<"sub is"<<sub<<endl;
cout<<"mult is"<<mult<<endl;
cout<<"div is"<<div<<endl;
cout<<"mod is"<<mod<<endl;
return 0;
}
```

QNO4: Accept the values in meter then display in inches and centimeters.

```
#include<iostream>
#include<math.h>
using namespace std;
int main()
{
  float meters,inches,centimeters;
  cout<<"enter value in meters"<<endl;
  cin>>meters;
  inches=39.70*meters;
  centimeters=100*meters;
  cout<<"value in inches"<<inches<<endl;
  cout<<"value in centimeters"<<centimeters<<endl;

  return 0;
  }
```

QNO5: Accept the values in GB and display the value in bytes.

HINT:

1 GB=1024*1024*1024 bytes

```
#include <iostream>
```

```
using namespace std;
int main()
{
  float gb,bytes;
  cout<<"enter value in gb"<<endl;
  cin>>gb;
  bytes=1024*1024*1024;
  cout<<"value of bytes is"<<bytes;
  return 0;
  }
```

QNO6: Write a program that asks the user to type the width and the length of a rectangle and then outputs to the screen the area and the perimeter of that rectangle.

```
#include<iostream>
#include<math.h>
using namespace std;
int main()
{
  float area, perimeter, length,width;
cout<<"enter length and width of rectangle"<<endl;
cin>>length>>width;
area=length*width;
perimeter=2*(length+width);
cout<<"area of rectangle is"<<area<<endl;
cout<<"perimeter of rectangle is"<<perimeter<<endl;

  return 0;
  }
```

QNO7: Write a program which accept temperature in Fahrenheit and print it in centigrade

```
#include<iostream>
#include<math.h>
using namespace std;
int main()
{
  float Farhenhit, Celsius;
cout<<"Enter temperature in Farhenhit"<<endl;
cin>>Farhenhit;
Celsius=5*(Farhenhit-32)/9;
```

```
cout<<"temp in Celsius is"<<Celsius<<endl;
  return 0;


}
```

QNO8:Write a program which accepts a character and display its next character.

```
#include<iostream>
#include<math.h>
using namespace std;
int main()
{
  char ch;
cout<<"Enter any character"<<endl;
cin>>ch;
ch++;
cout<<"enter next character"<<ch++<<endl;
  }
```

QNO9: Write a program to swap the values of two variables.

```
#include<iostream>
#include<math.h>
using namespace std;
int main()
{
  float var1,var2,temp=0;
cout<<"enter variable 1 and 2"<<endl;
cin>>var1>>var2;
temp=var1;
var1=var2;
var2=temp;
cout<<"values of variables after swapping"<<endl;
cout<<"variable 1 is"<<var1<<"variable 2 is"<<var2<<endl;
  }
```

QNO10: Write a program to swap value of two variables without using third variable

```
#include<iostream>
```

```
#include<math.h>
using namespace std;
int main()
{
  float var1,var2;
cout<<"enter variable 1 and 2"<<endl;
cin>>var1>>var2;
var1=var1+var2;
var2=var1-var2;
var1=var1-var2;
cout<<"values of variables after swapping"<<endl;
cout<<"variable 1 is"<<var1<<"variable 2 is"<<var2<<endl;
  }
```

QNO11:What is the output of following program?

```
int result = 4 + 5 * 6 + 2;
cout << result;
```

ANSWER IS 36

```
int a = 5 + 7 % 2;
cout << a;
```

ANSWER IS 6

QNO12: Write a program which accepts days as integer and display total number of years, months and days in it.
For example: If user input as 856 days the output should be 2 years 4 months 6 days.

Qno12

```
#include<iostream>
#include<math.h>
using namespace std;
int main()
{
  int days,months,years;
cout<<"Enter number of days"<<endl;
cin>>days;
years=days/365;
days=days%365;
months=days/30;
days=days%30;
```

```
cout<<"years"<<years;
cout<<"months"<<months;
cout<<"days"<<days<<endl;
  }
```

QNO13: Accept 5 digits no from the user then display following option.

No=12345

Result =15

```
#include<iostream>
#include<math.h>
using namespace std;
int main()
{
  int number,sum=0,dig1,dig2,dig3,dig4,dig5;
cout<<"Enter a five digit number"<<endl;
cin>>number;
dig1=number%10;
cout<<dig1;
number=number/10;
dig2=number%10;
number=number/10;
dig3=number%10;
number=number/10;
dig4=number%10;
number=number/10;
dig5=number%10;
sum=dig1+dig2+dig3+dig4+dig5;
cout<<"the sum of all five digits is"<<sum<<endl;
return 0;
  }
```

THE END