FESE-19052

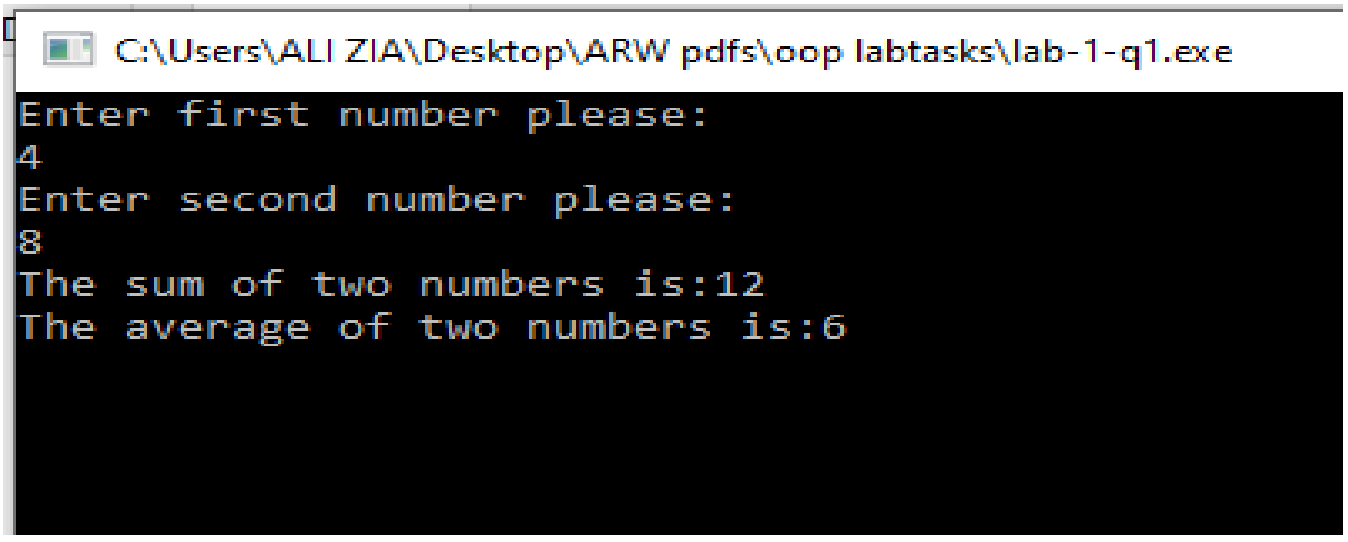
LAB TASK WEEK-2

Ali Zia Khan

Q1: Write a program that read two integers from the keyboard and print their sum and average.

```
#include<iostream>
#include<conio.h>

using namespace std;
int main()
{
   int a,b;
   int sum;
   double average;
   cout<<"Enter first number please:"<<endl;
   cin>>a;
   cout<<"Enter second number please:"<<endl;
   cin>>b;

   sum=a+b;
   average=sum/2;

   cout<<"The sum of two numbers is:"<<sum<<endl;
   cout<<"The average of two numbers is:"<<average<<endl;

   _getch();
   return 0;

}
```

OUTPUT:



Q#2: Write a program that prompts for a person's height in inches. Convert this height measurement into feet by using the conversion factor of `foot2Inch= 12 inch`. Now, the value obtained can easily, be translated into feet and inches which are then output by the program.

```
#include<iostream>
#include<conio.h>

using namespace std;
int main()
{
  int feets;
  int inches;
  int ft;
  cout<<" Enter your height in inches please:\t";
  cin>>inches;
  feets=inches/12;
  ft=inches%12;

  cout<<"AFTER CONVERSION:"<<endl;
  cout<<"Your height in feet inches is:"<<feets<<"*"<<" "<<ft<<"'"<<endl;
  return 0;

}
```

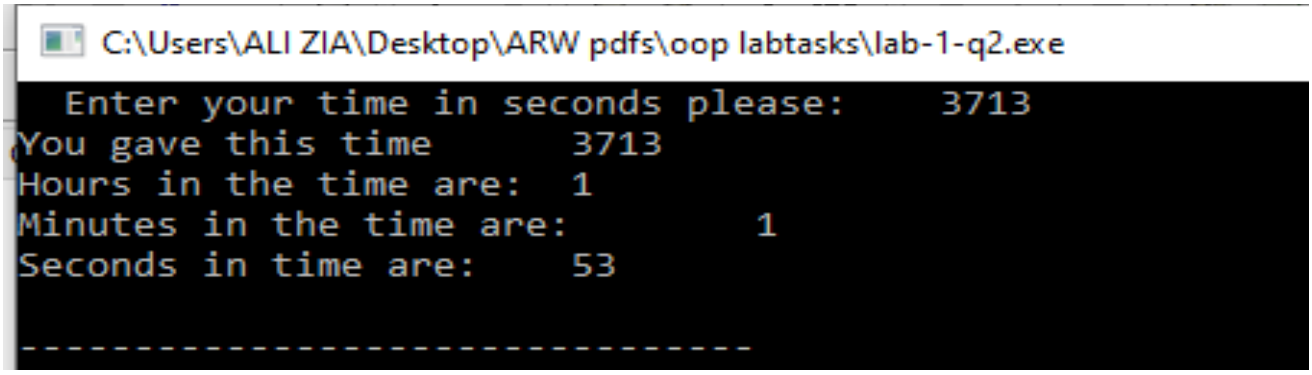
OUTPUT:

```
C:\Users\ALI ZIA\Desktop\web dev\testprepoop\heightconversion.exe
 Enter your height in inches please:    62
AFTER CONVERSION:
Your height in feet inches is:5* 2'

--------------------------------
Process exited after 2.253 seconds with return value 0
Press any key to continue . . .
```

Q3 Write a program that prompts for time in seconds and output that time in hours, minutes, and seconds. Here student will learn the usage of divide and modulus arithmetic operators in integers.

```
#include<iostream>
#include<conio.h>

using namespace std;
int main()
{
  int time;
  int hours,hr;

  int min;
  int sec;
  cout<<"  Enter your time in seconds please:\t";
  cin>>time;
  hours=time/3600;
  hr=time%3600;
  min=hr/60;
  sec=hr%60;

  cout<<"You gave this time\t"<<time<<endl;
  cout<<"Hours in the time are:\t"<<hours<<endl;
  cout<<"Minutes in the time are:\t"<<min<<endl;
  cout<<"Seconds in time are:\t"<<sec<<endl;
  return 0;

}
```

OUTPUT:



Q4#: Write a program that prompts for amount in rupees and show how many 1000's, 500's, 100's, 50's, 10's, 5's, 2's and 1's in it.

Q5#: Write a program that calculates the temperature in Fahrenheit. For that it prompts for temperature in Celsius degrees. Formula to calculate Fahrenheit temperature is Fahrenheit=Celsius (9/5+32). Once if the task done do the vice versa i.e. Celsius=5/9(Fahrenheit -32)

```
#include<iostream>
#include<conio.h>
using namespace std;
int main(){

    cout<<"Temperature converter"<<endl;
    double f,c;
    double fah,cen;
    cout<<"Enter temperature in fahrenheit: \t";
    cin>>f;
    cen=(f-32)/1.8;
    cout<<"The temperature in centigrade is :\t"<<cen<<endl;
    cout<<"Enter temperature in centigrade: \t";
    cin>>c;
    fah=1.8*c+(32);
    cout<<"The temperature in fahrenheit is :\t"<<fah<<endl;

}
```

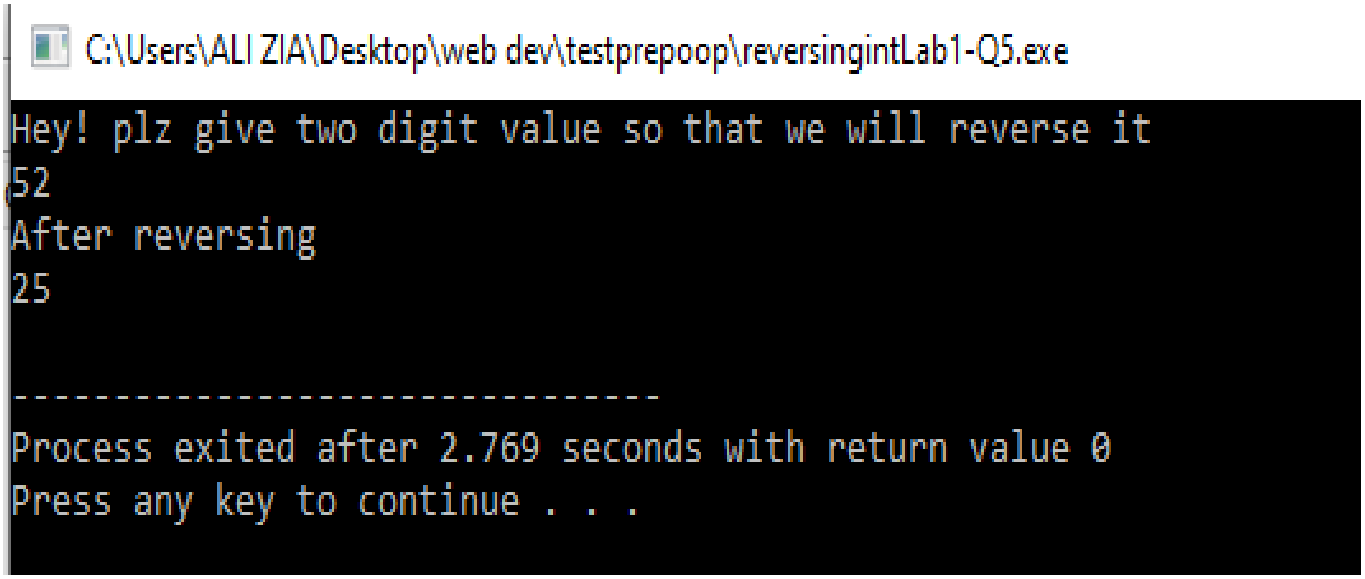
OUTPUT:

```
C:\Users\ALI ZIA\Desktop\web dev\testprepoop\tempconv.exe
Temperature converter
Enter temperature in fahrenheit:        98.6
The temperature in centigrade is :      37
Enter temperature in centigrade:        37
The temperature in fahrenheit is :      98.6

--------------------------------
Process exited after 17.92 seconds with return value 0
Press any key to continue . . .
```

Q5# : Write a program that inputs a two digit integer value, and output its reverse order.

```
#include<iostream>
#include<conio.h>
#include<math.h>
using namespace std;
int main()

    int n,rev,rem=0;
    cout<<"Hey! plz give two digit value so that we will reverse it"<<endl;
    cin>>n;
    while(n!=0){
        rem=n%10;
        rev=rev*10+rem;
        n/=10;

    }

    cout<<"After reversing\n"<<rev<<endl;
    return 0;
```

OUTPUT:



Q#7": Write a program that reads the two digit number as two characters chTen and chUnit and convert that two digit number into an integer value. In order to compute the corresponding integer value, each character must be converted to the digit in the range 0 to 9. this is done by subtracting 48('0') from the ASCII value of the character.

```
ValueTen=chTen-'0';  // '8'-'0' is 8
ValueUnit=chUnit-'0';  // '2'-'0' is 2
```

To create integer value fro m, the positional value of each digit must be used. In this case multiply ValueTen by 10.

```
M=ValueTen*10+ValueUnit;//m=8*10+2=82
```

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

int main(){

int chTen,chUnit;
int a[2];
cout<<"Enter a two digit number"<<endl;
for(int i=0;i<2;i++){
    cin>>a[i];

};
 chTen=a[0]-0;
chUnit=a[1]-0;


int m=chTen*10+chUnit*1;
cout<<"The integer value is"<<endl;;
cout<<m<<endl;
}
```

OUTPUT: