PATUAKHALI SCIENCE AND TECHNOLOGY UNIVERSITY

Course Code: CIT-112

SUBMITTED TO:

MD Mahbubur Rahman Sir

Department of Computer Science And Communication Engineering

Faculty of Computer Science And Engineering

SUBMITTED BY:

Name: MD Noushad Bhuiyan

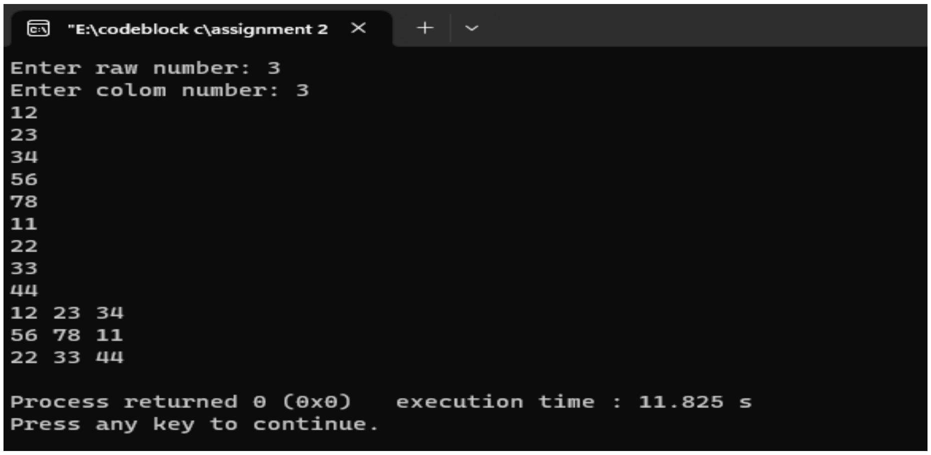
ID: 20210238, Registration No: 10165

Faculty of Computer Science and Engineering

Date of submission: 22-3-2023

1. 2D Array Scanning value

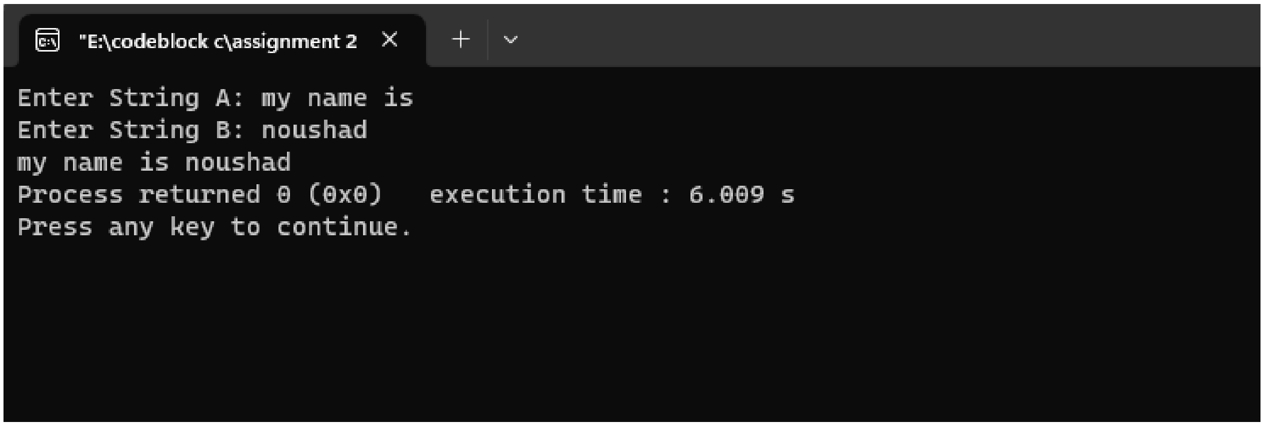
```
#include<stdio.h>
int main()
{
   int n1,n2,a[100][100],i,j;
   printf("Enter raw number: ");
   scanf("%d",&n1);
   printf("Enter colom number: ");
   scanf("%d",&n2);


   for(i=0;i<n1;i++)
   {
      for(j=0;j<n2;j++)
      {
         scanf("%d",&a[i][j]);
      }

   }
   for(i=0;i<n1;i++)
   {
      for(j=0;j<n2;j++)
      {
         printf("%d ",a[i][j]);
      }
      printf("\n");
   }
}
```



```
Enter raw number: 3
Enter colom number: 3
12
23
34
56
78
11
22
33
44
12 23 34
56 78 11
22 33 44

Process returned 0 (0x0)   execution time : 11.825 s
Press any key to continue.
```

2. Add another string without using strcat function

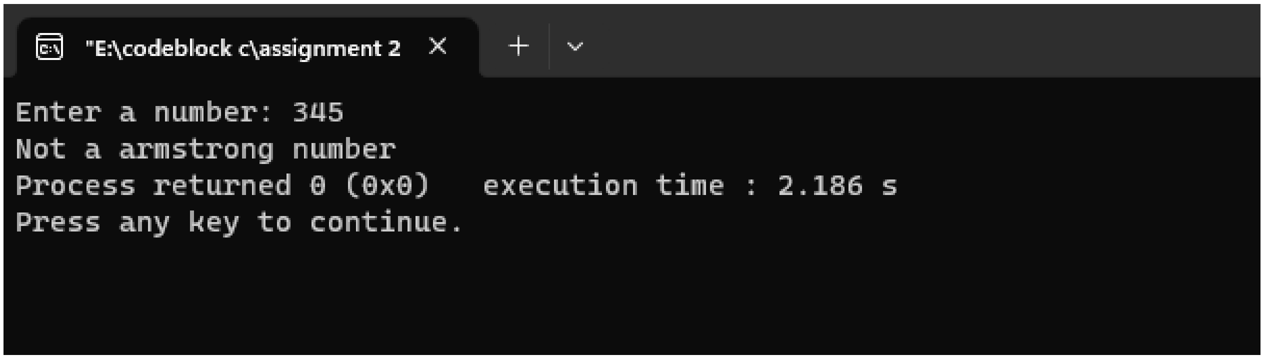
```
#include<stdio.h>
int main()
{
   char len=0,a[1000],b[1000],i,j;
   printf("Enter String A: ");
   gets(a);
   printf("Enter String B: ");
   gets(b);
   i=0;
   j=0;
   while(a[i]!='\0')
   {
      len++;
      i++;
   }
   while(b[j]!=0)
   {
      a[len+j]=b[j];
      j++;

   }
   printf("%s",a);

}
```



```
Enter String A: my name is
Enter String B: noushad
my name is noushad
Process returned 0 (0x0)   execution time : 6.009 s
Press any key to continue.
```

3. Armstrong Number

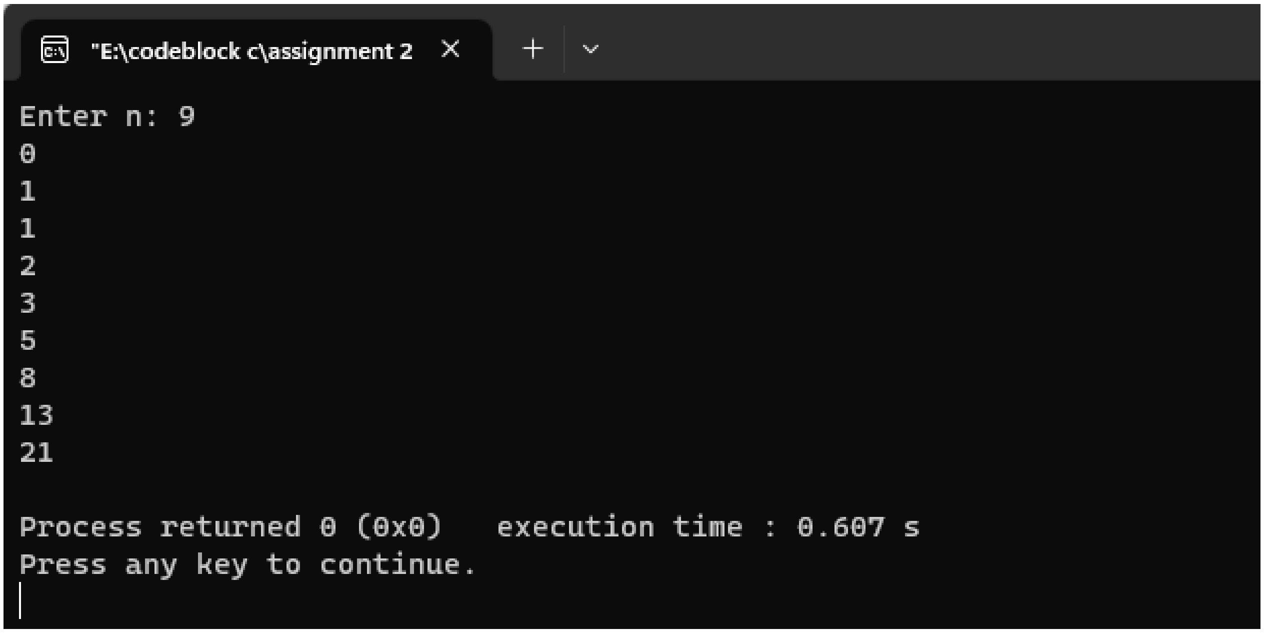
```
#include<stdio.h>
int main()
{
   int n,num,temp=0,r;
   printf("Enter a number: ");
   scanf("%d",&n);
   num=n;
   while(num!=0)
   {
      r=num%10;
      temp=temp+(r*r*r);
      num=num/10;
   }
   if(temp==n)
      printf("The number is a armstrong number");
   else
      printf("Not a armstrong number");
   return 0;
}
```



```
Enter a number: 345
Not a armstrong number
Process returned 0 (0x0)   execution time : 2.186 s
Press any key to continue.
```

4. Array Fibonacci number

```
#include<stdio.h>
int main()
{

   int sum=0,i,n,a[100];
   printf("Enter n: ");
   scanf("%d",&n);
   a[0]=0;
   a[1]=1;
   printf("%d\n",a[0]);
   printf("%d\n",a[1]);
   for(i=2;i<n;i++)
   {
      a[i]=a[i-1]+a[i-2];
      printf("%d\n",a[i]);
   }


}
```

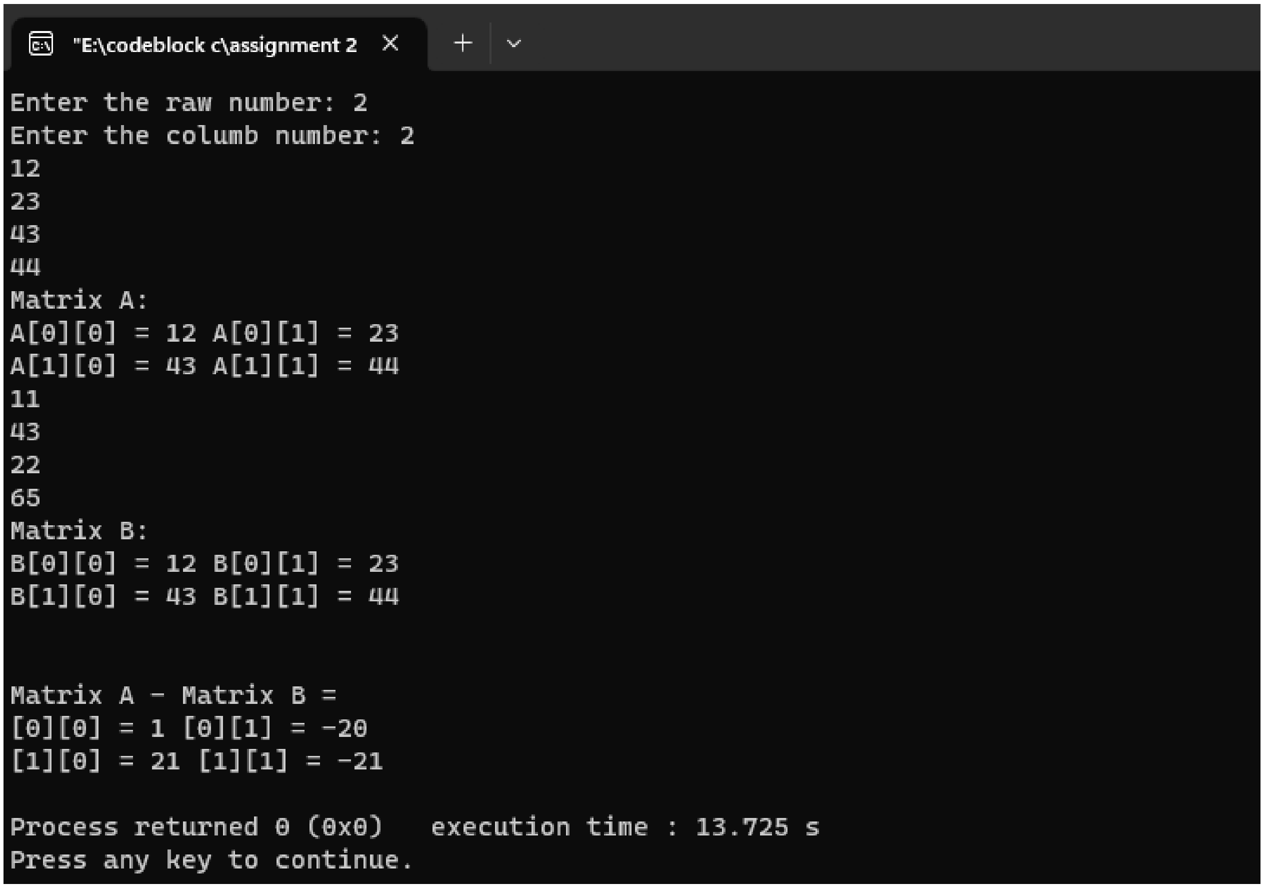


```
Enter n: 9
0
1
1
2
3
5
8
13
21

Process returned 0 (0x0)   execution time : 0.607 s
Press any key to continue.
```

5. Array matrix Sub

```
#include<stdio.h>
int main()
{
   int i,j,n1,n2,a[100][100],b[100][100],c[100][100];
   printf("Enter the raw number: ");
   scanf("%d",&n1);
   printf("Enter the columb number: ");
   scanf("%d",&n2);
   for(i=0;i<n1;i++)
   {
      for(j=0;j<n2;j++)
      {
         scanf("%d",&a[i][j]);
      }
   }
   printf("Matrix A:\n");
   for(i=0;i<n1;i++)
   {
      for(j=0;j<n2;j++)
         {printf("A[%d][%d] = %d ",i,j,a[i][j]);
   }
   printf("\n");
   }
   //end of matrix a
   for(i=0;i<n1;i++)
   {
      for(j=0;j<n2;j++)
      {
         scanf("%d",&b[i][j]);
      }
   }
   printf("Matrix B:\n");
   for(i=0;i<n1;i++)
   {
      for(j=0;j<n2;j++)
      {
         printf("B[%d][%d] = %d ",i,j,a[i][j]);
      }
```

```
        printf("\n");
        }
        //end of matrix b;
        printf("\n\nMatrix A - Matrix B = \n");
        for(i=0;i<n1;i++)
        {
          for(j=0;j<n2;j++)
          {
            c[i][j]= a[i][j]-b[i][j];

            printf("[%d][%d] = %d ",i,j,c[i][j]);
          }
          printf("\n");
          }

}
```

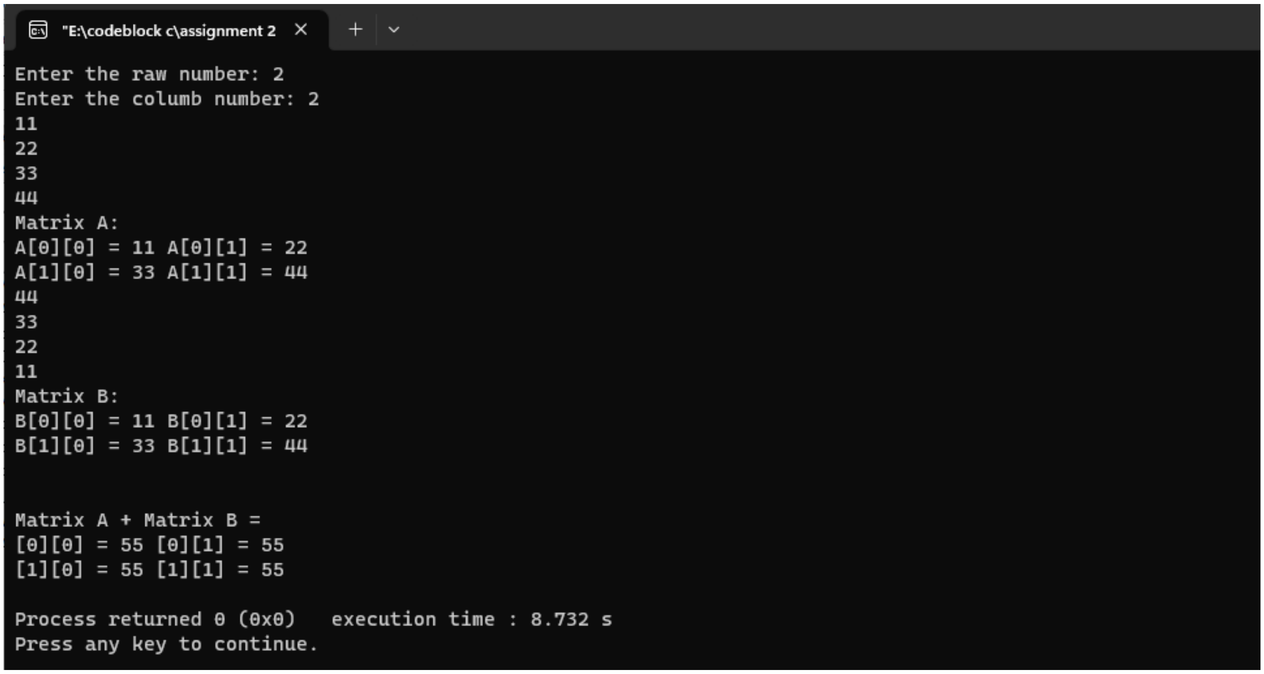


```
Enter the raw number: 2
Enter the columb number: 2
12
23
43
44
Matrix A:
A[0][0] = 12 A[0][1] = 23
A[1][0] = 43 A[1][1] = 44
11
43
22
65
Matrix B:
B[0][0] = 12 B[0][1] = 23
B[1][0] = 43 B[1][1] = 44


Matrix A - Matrix B =
[0][0] = 1 [0][1] = -20
[1][0] = 21 [1][1] = -21

Process returned 0 (0x0)   execution time : 13.725 s
Press any key to continue.
```

6. Array matrix Sum

```
#include<stdio.h>
int main()
{
   int i,j,n1,n2,a[100][100],b[100][100],c[100][100];
   printf("Enter the raw number: ");
   scanf("%d",&n1);
   printf("Enter the columb number: ");
   scanf("%d",&n2);
   for(i=0;i<n1;i++)
   {
      for(j=0;j<n2;j++)
      {
         scanf("%d",&a[i][j]);
      }
   }
   printf("Matrix A:\n");
   for(i=0;i<n1;i++)
   {
      for(j=0;j<n2;j++)
         {printf("A[%d][%d] = %d ",i,j,a[i][j]);
   }
   printf("\n");
   }
   //end of matrix a
   for(i=0;i<n1;i++)
   {
      for(j=0;j<n2;j++)
      {
         scanf("%d",&b[i][j]);
      }
   }
   printf("Matrix B:\n");
   for(i=0;i<n1;i++)
   {
      for(j=0;j<n2;j++)
      {
         printf("B[%d][%d] = %d ",i,j,a[i][j]);
      }
```

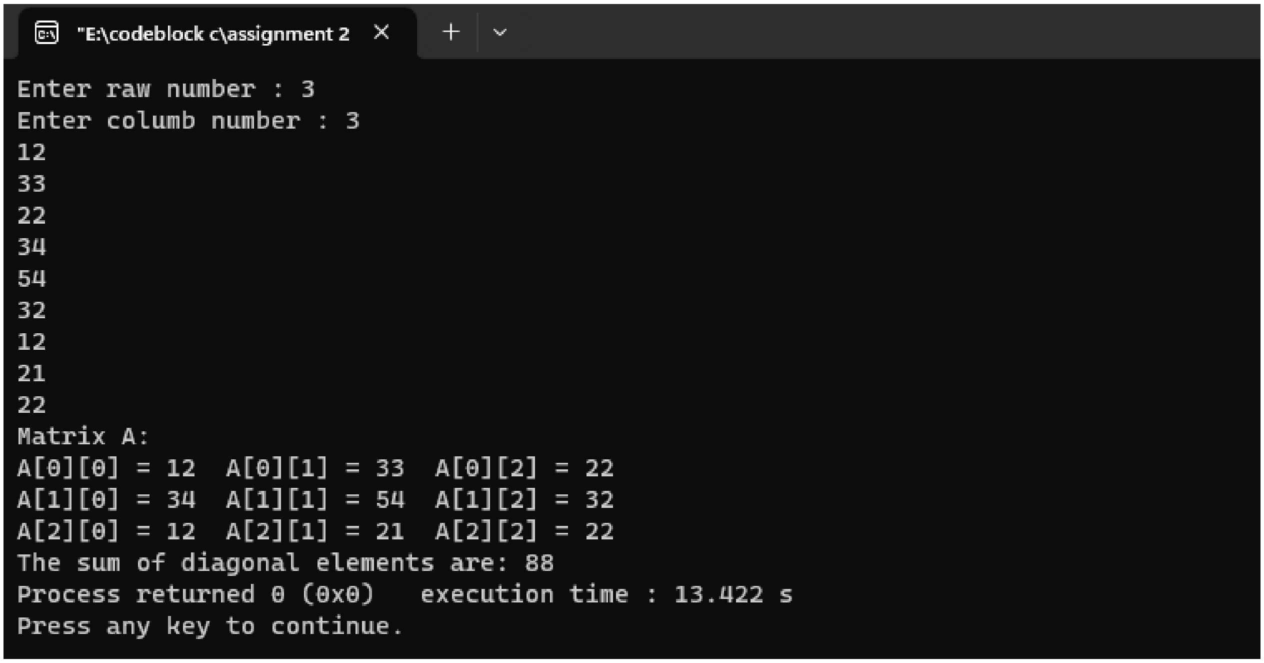
```
        printf("\n");
        }
        //end of matrix b;
        printf("\n\nMatrix A - Matrix B = \n");
        for(i=0;i<n1;i++)
        {
          for(j=0;j<n2;j++)
          {
            c[i][j]= a[i][j]+b[i][j];

            printf("[%d][%d] = %d ",i,j,c[i][j]);
          }
          printf("\n");
          }

}
```



```
Enter the raw number: 2
Enter the columb number: 2
11
22
33
44
Matrix A:
A[0][0] = 11 A[0][1] = 22
A[1][0] = 33 A[1][1] = 44
44
33
22
11
Matrix B:
B[0][0] = 11 B[0][1] = 22
B[1][0] = 33 B[1][1] = 44


Matrix A + Matrix B =
[0][0] = 55 [0][1] = 55
[1][0] = 55 [1][1] = 55

Process returned 0 (0x0)   execution time : 8.732 s
Press any key to continue.
```

7. Array matrix sum of Diagonal digits

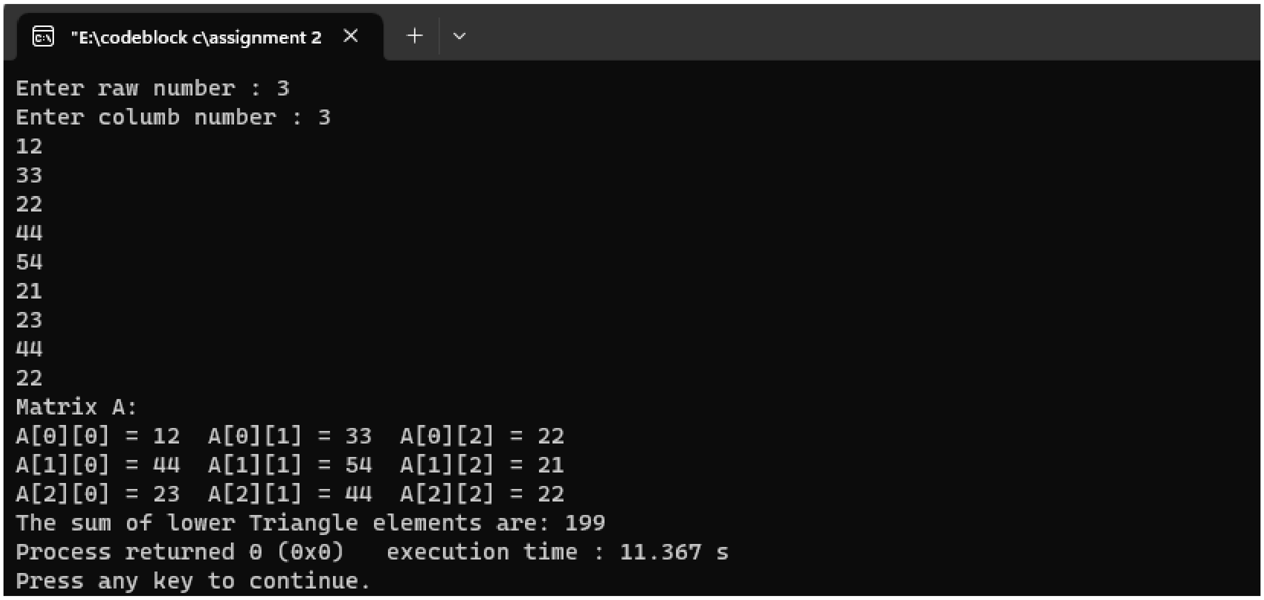
```
#include<stdio.h>
int main()
//The sum of diagonal elements
{
   int n1,n2,i,j,a[100][100],sum=0;
   printf("Enter raw number : ");
   scanf("%d",&n1);
   printf("Enter columb number : ");
   scanf("%d",&n2);
   for(i=0;i<n1;i++)
   {
      for(j=0;j<n2;j++)
      {
         scanf("%d",&a[i][j]);
      }
   }
   printf("Matrix A:\n");
   for(i=0;i<n1;i++)
   {
      for(j=0;j<n2;j++)
      {
         printf("A[%d][%d] = %d  ",i,j,a[i][j]);

      }
      printf("\n");
   }
   for(i=0;i<n1;i++)
   {
      for(j=0;j<n2;j++)
      {
         if(i==j )
         {
            sum=sum+a[i][j];
         }
      }
   }
   printf("The sum of diagonal elements are: %d",sum);
}
```



```
Enter raw number : 3
Enter columb number : 3
12
33
22
34
54
32
12
21
22
Matrix A:
A[0][0] = 12  A[0][1] = 33  A[0][2] = 22
A[1][0] = 34  A[1][1] = 54  A[1][2] = 32
A[2][0] = 12  A[2][1] = 21  A[2][2] = 22
The sum of diagonal elements are: 88
Process returned 0 (0x0)   execution time : 13.422 s
Press any key to continue.
```

8. Array matrix sum of lower triangle digits of matrix

```
#include<stdio.h>
int main()
//The sum of lower Triangle digits
{
   int n1,n2,i,j,a[100][100],sum=0;
   printf("Enter raw number : ");
   scanf("%d",&n1);
   printf("Enter columb number : ");
   scanf("%d",&n2);
   for(i=0;i<n1;i++)
   {
      for(j=0;j<n2;j++)
      {
         scanf("%d",&a[i][j]);
      }
   }
   printf("Matrix A:\n");
   for(i=0;i<n1;i++)
   {
      for(j=0;j<n2;j++)
      {
         printf("A[%d][%d] = %d  ",i,j,a[i][j]);

      }
      printf("\n");
   }
   for(i=0;i<n1;i++)
   {
      for(j=0;j<n2;j++)
      {
         if(i==j || i>j)
         {
            sum=sum+a[i][j];
         }
      }
   }
   printf("The sum of lower Triangle elements are: %d",sum);
}
```

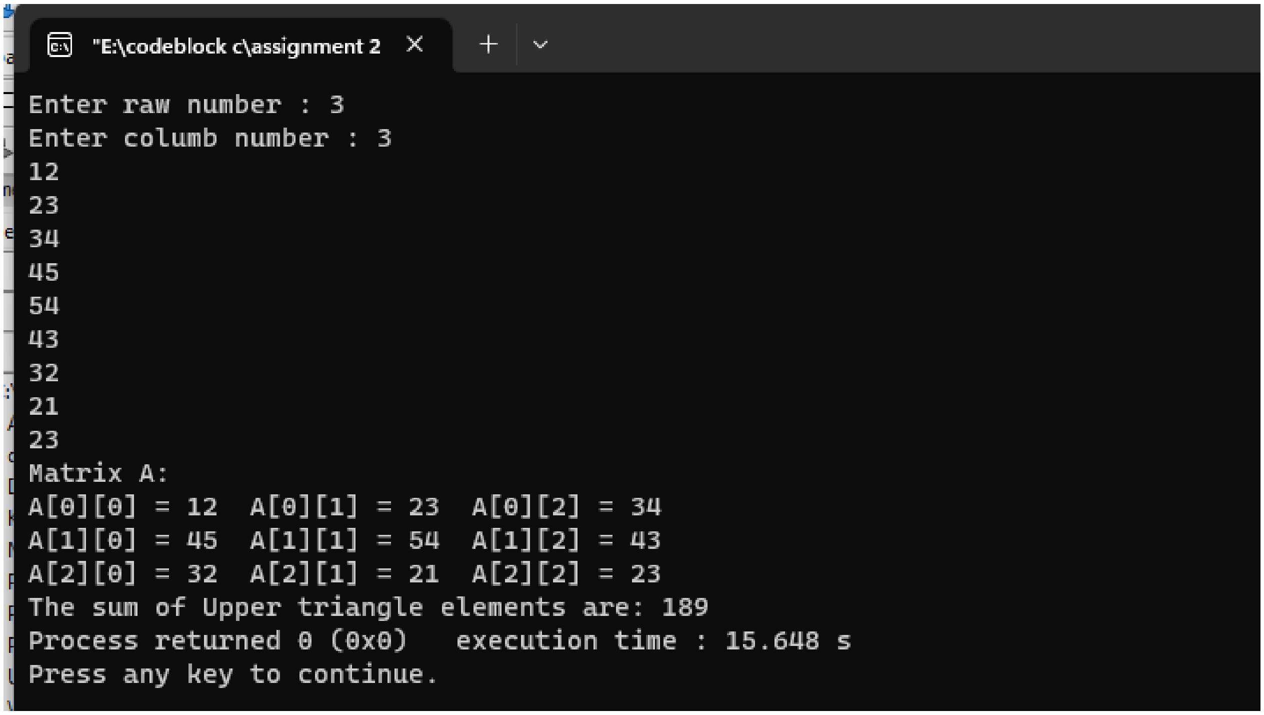


```
Enter raw number : 3
Enter columb number : 3
12
33
22
44
54
21
23
44
22
Matrix A:
A[0][0] = 12  A[0][1] = 33  A[0][2] = 22
A[1][0] = 44  A[1][1] = 54  A[1][2] = 21
A[2][0] = 23  A[2][1] = 44  A[2][2] = 22
The sum of lower Triangle elements are: 199
Process returned 0 (0x0)   execution time : 11.367 s
Press any key to continue.
```

9. Array matrix sum of upper Triangle digits

```
#include<stdio.h>
int main()
//The sum of Upper triangle digits
{
   int n1,n2,i,j,a[100][100],sum=0;
   printf("Enter raw number : ");
   scanf("%d",&n1);
   printf("Enter columb number : ");
   scanf("%d",&n2);
   for(i=0;i<n1;i++)
   {
      for(j=0;j<n2;j++)
      {
         scanf("%d",&a[i][j]);
      }
   }
   printf("Matrix A:\n");
   for(i=0;i<n1;i++)
   {
      for(j=0;j<n2;j++)
      {
         printf("A[%d][%d] = %d  ",i,j,a[i][j]);

      }
      printf("\n");
   }
   for(i=0;i<n1;i++)
   {
      for(j=0;j<n2;j++)
      {
         if(i==j || i<j)
         {
            sum=sum+a[i][j];
         }
      }
   }
   printf("The sum of Upper triangle elements are: %d",sum);
```

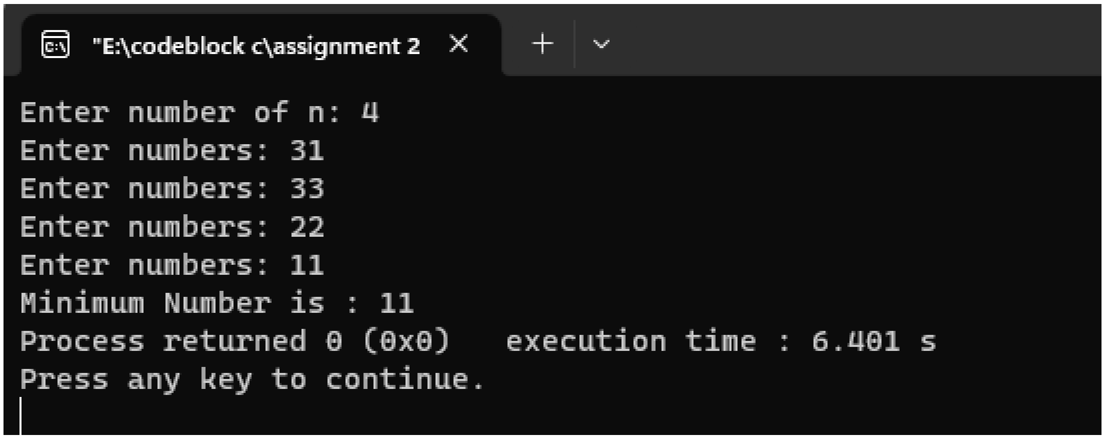
}



```
Enter raw number : 3
Enter columb number : 3
12
23
34
45
54
43
32
21
23
Matrix A:
A[0][0] = 12  A[0][1] = 23  A[0][2] = 34
A[1][0] = 45  A[1][1] = 54  A[1][2] = 43
A[2][0] = 32  A[2][1] = 21  A[2][2] = 23
The sum of Upper triangle elements are: 189
Process returned 0 (0x0)   execution time : 15.648 s
Press any key to continue.
```

10. **Array minimum number**

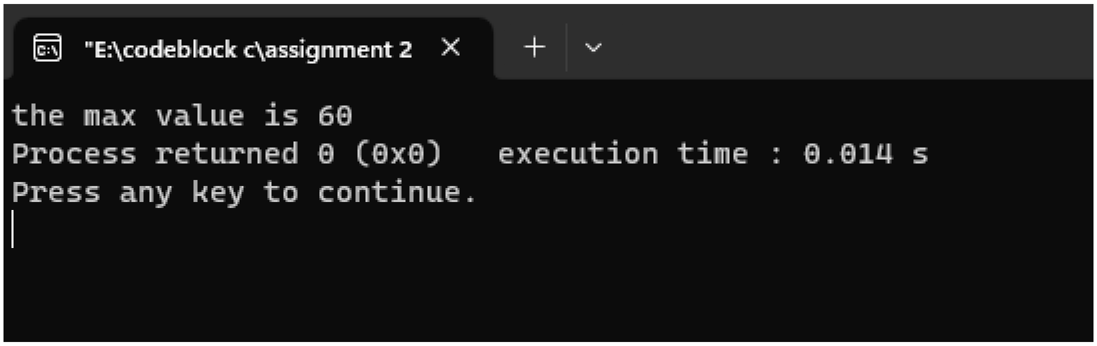
```
#include<stdio.h>
int main()
{

   int n,a[5],i;
   printf("Enter number of n: ");
   scanf("%d",&n);
   for(i=0;i<n;i++)
   {
      printf("Enter numbers: ");
      scanf("%d",&a[i]);
   }
   int min= a[0];
   for(i=1;i<n;i++)
   {
      if(min>a[i])
      {
         min=a[i];
      }
   }
   printf("Minimum Number is : %d",min);
}
```



```
Enter number of n: 4
Enter numbers: 31
Enter numbers: 33
Enter numbers: 22
Enter numbers: 11
Minimum Number is : 11
Process returned 0 (0x0)   execution time : 6.401 s
Press any key to continue.
```

11. Array max value with using function

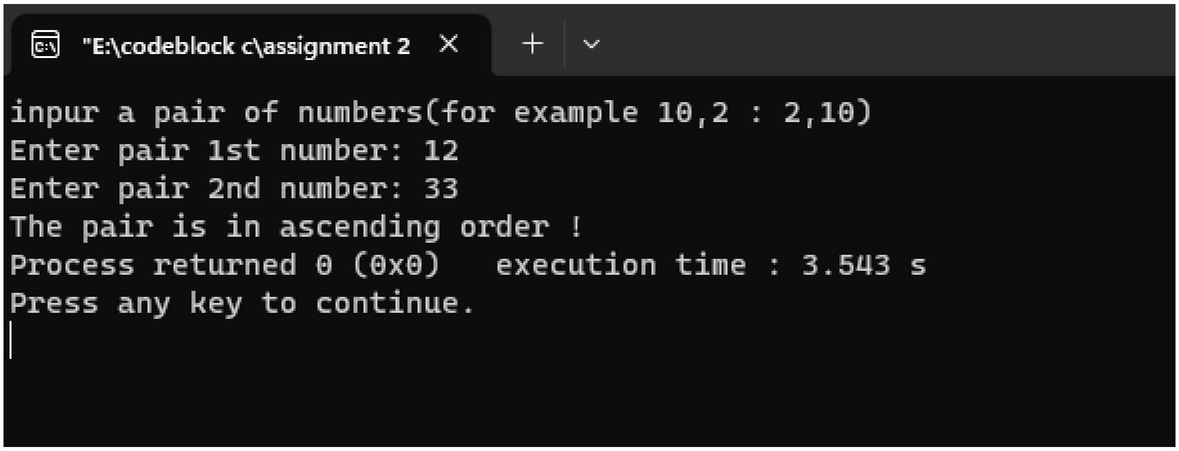
```
#include<stdio.h>
int maximum(int x[])
{
   int i,max;
   max=x[0];
   for(i=0;i<5;i++)
   {
      if(max<x[i])
         max=x[i];
   }
   return max;

}


int main()

{
   int a[]={20,30,40,50,60};
 int maxi  =   maximum(a);
   printf("the max value is %d",maxi);

}
```



```
the max value is 60
Process returned 0 (0x0)   execution time : 0.014 s
Press any key to continue.
```

12.Ascending to descending Form

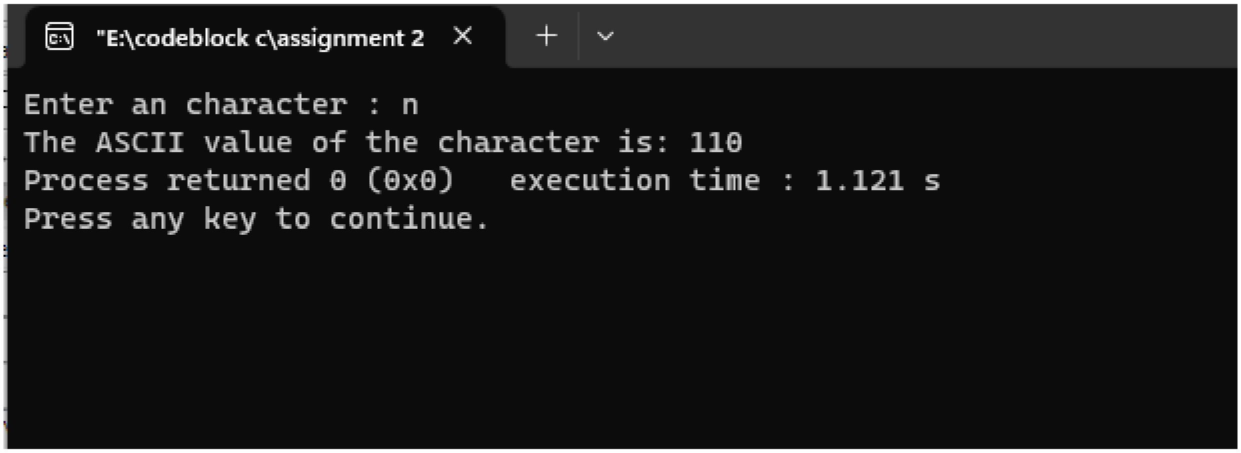
```
#include<stdio.h>
int main()
{   int i,j;
    printf("inpur a pair of numbers(for example 10,2 : 2,10)\n");
    printf("Enter pair 1st number: ");
    scanf("%d",&i);
    printf("Enter pair 2nd number: ");
    scanf("%d",&j);
    if(i>j)
        {printf("The pair is in descending order !");}
    else
        {printf("The pair is in ascending order !");}
}
```



```
inpur a pair of numbers(for example 10,2 : 2,10)
Enter pair 1st number: 12
Enter pair 2nd number: 33
The pair is in ascending order !
Process returned 0 (0x0)   execution time : 3.543 s
Press any key to continue.
```

13.ASCII Value to Integer number

```
#include<stdio.h>
int main()
{   char n;
    printf("Enter an character : ");
    scanf("%c",&n);
    printf("The ASCII value of the character is: %d",n);
    return 0;
}
```

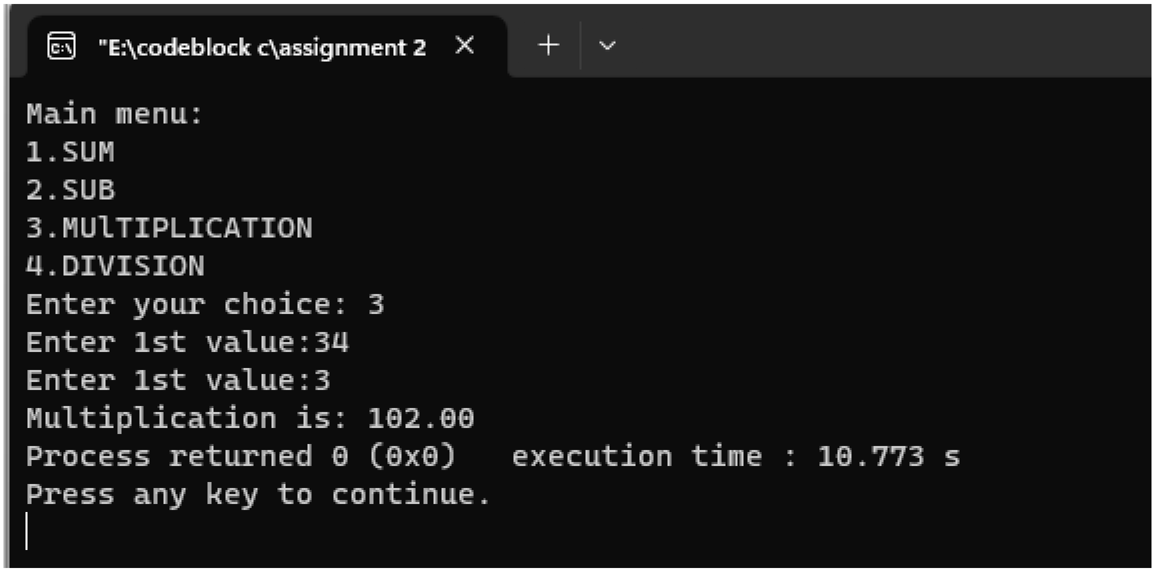


```
Enter an character : n
The ASCII value of the character is: 110
Process returned 0 (0x0)   execution time : 1.121 s
Press any key to continue.
```

14.Calculator (Sum, Sub, Multiplication, Division)

```
#include<stdio.h>
int main()
{
   float sum,sub,mul,div;
   int a,b,n;
   printf("Main menu:\n1.SUM\n2.SUB\n3.MUlTIPLICATION\n4.DIVISION\nEnter your choice: ");
   scanf("%d",&n);
   switch(n)
   {
   case 1:
      {printf("Enter 1st value:");
      scanf("%d",&a);
      printf("Enter 1st value:");
      scanf("%d",&b);
      sum=a+b;
      printf("Sum is: %0.2f",sum);}
      break;
   case 2:
      {printf("Enter 1st value:");
      scanf("%d",&a);
      printf("Enter 1st value:");
      scanf("%d",&b);
      sub=a-b;
      printf("Sub is: %0.2f",sub);}
      break;
   case 3:
      {printf("Enter 1st value:");
      scanf("%d",&a);
      printf("Enter 1st value:");
      scanf("%d",&b);
      mul=a*b;
      printf("Multiplication is: %0.2f",mul);}
      break;
   case 4:
      {printf("Enter 1st value:");
      scanf("%d",&a);
      printf("Enter 1st value:");
```

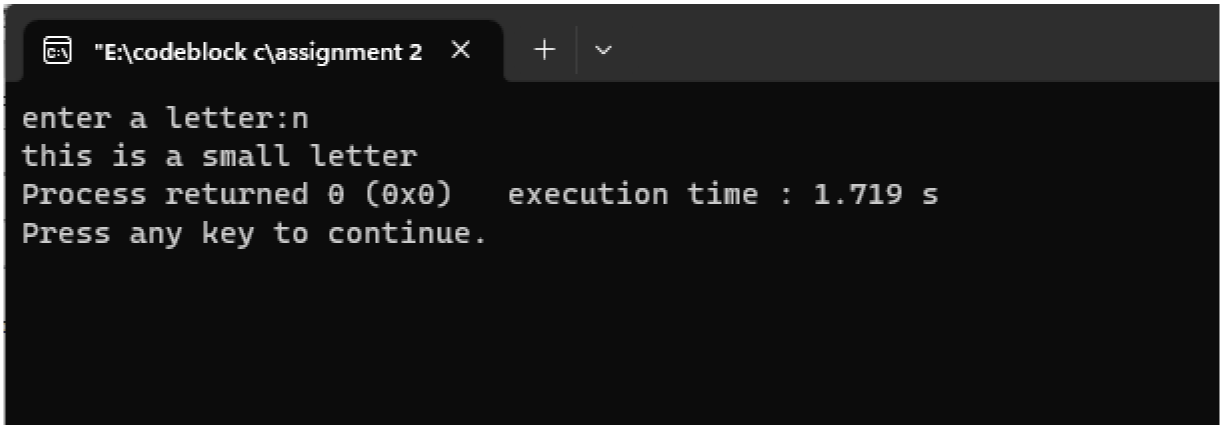
```
        scanf("%d",&b);
        div=a/b;
        printf("Division is: %0.2f",div);}
        break;

    }
}
```



```
Main menu:
1.SUM
2.SUB
3.MUlTIPLICATION
4.DIVISION
Enter your choice: 3
Enter 1st value:34
Enter 1st value:3
Multiplication is: 102.00
Process returned 0 (0x0)   execution time : 10.773 s
Press any key to continue.
```

15.Capital and small letter recognition

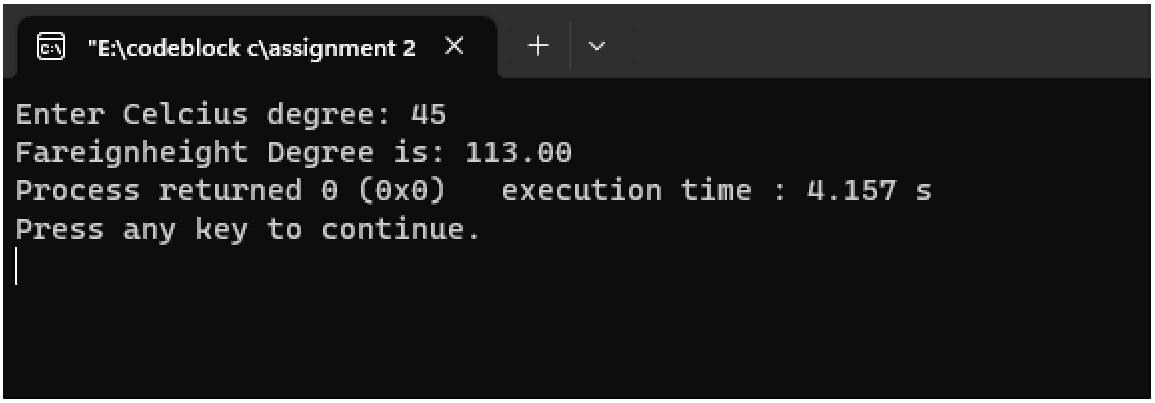
```
#include<stdio.h>
int main()
{
   char ch;
   printf("enter a letter:");
   scanf("%c",&ch);
   if(ch>='a'&&ch<='z')
      printf("this is a small letter");
   else if(ch>='A'&&ch<='Z')
      printf("this is a capital letter");

   return 0;
}
```



```
enter a letter:n
this is a small letter
Process returned 0 (0x0)   execution time : 1.719 s
Press any key to continue.
```

16.Celsius to fahrenheight

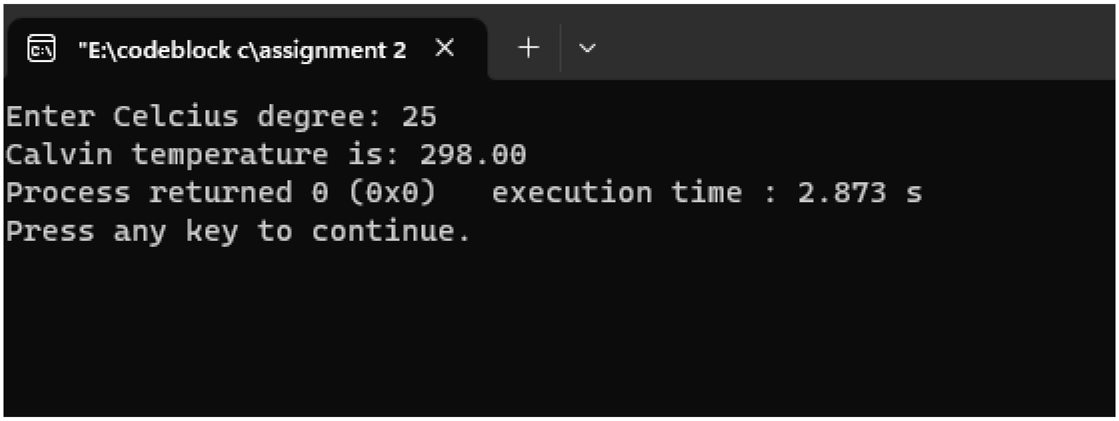
```
#include<stdio.h>
int main()
{
   float c,f;
   printf("Enter Celcius degree: ");
   scanf("%f",&c);
   f=(((9*c)/5)+32);
   printf("Fareignheight Degree is: %0.2f",f);

}
```



```
Enter Celcius degree: 45
Fareignheight Degree is: 113.00
Process returned 0 (0x0)   execution time : 4.157 s
Press any key to continue.
```

17.Celsius to kelvin

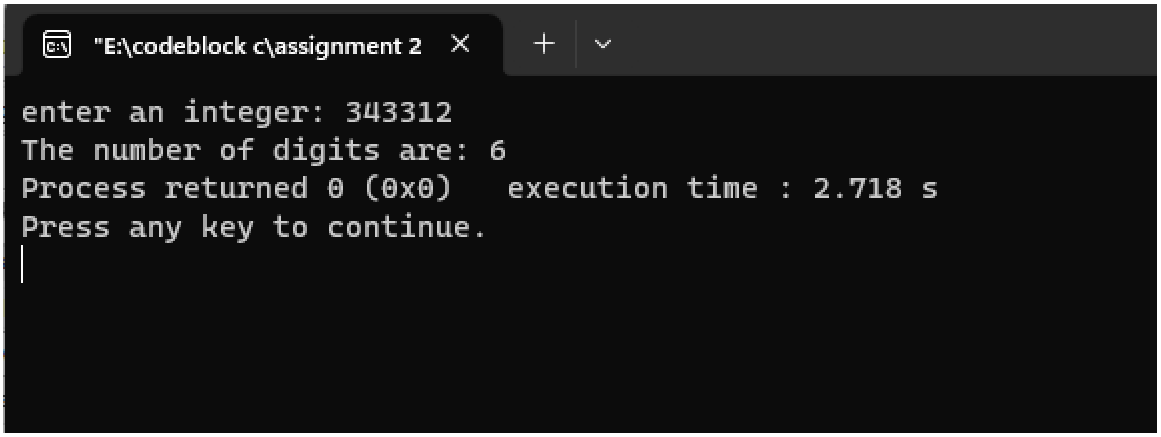
```
#include<stdio.h>
int main()
{
   float c,k;
   printf("Enter Celcius degree: ");
   scanf("%f",&c);
   k=(c+273);
   printf("Calvin temperature is: %0.2f",k);

}
```



```
Enter Celcius degree: 25
Calvin temperature is: 298.00
Process returned 0 (0x0)   execution time : 2.873 s
Press any key to continue.
```

18.Counting the number of a digit in an integer.

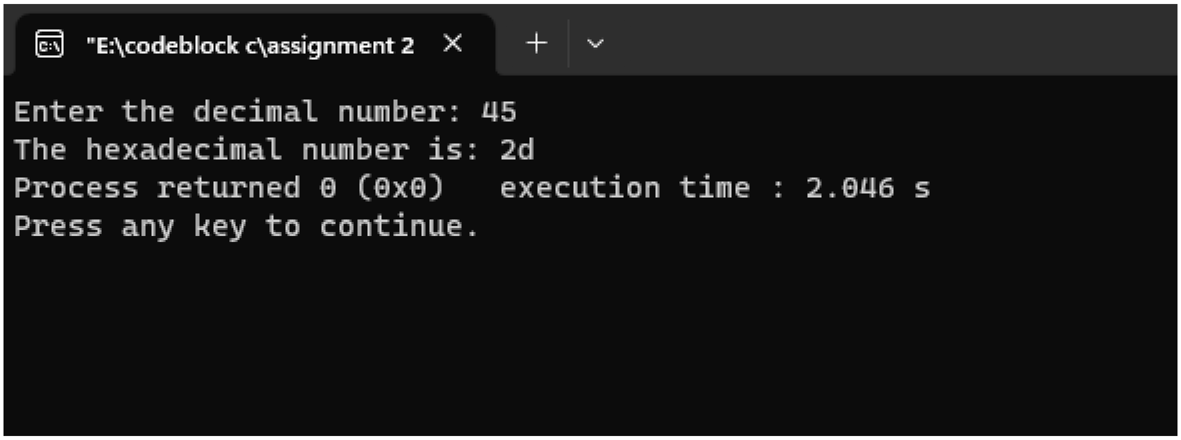
```
#include<stdio.h>
int main()
{
   int n,r,sum=0;
   printf("enter an integer: ");
   scanf("%d",&n);
   while(n!=0)
   {

      n=n/10;
      sum++;
   }
   printf("The number of digits are: %d",sum);
   return 0;
}
```



```
enter an integer: 343312
The number of digits are: 6
Process returned 0 (0x0)   execution time : 2.718 s
Press any key to continue.
```

19.Decimal to hexadecimal

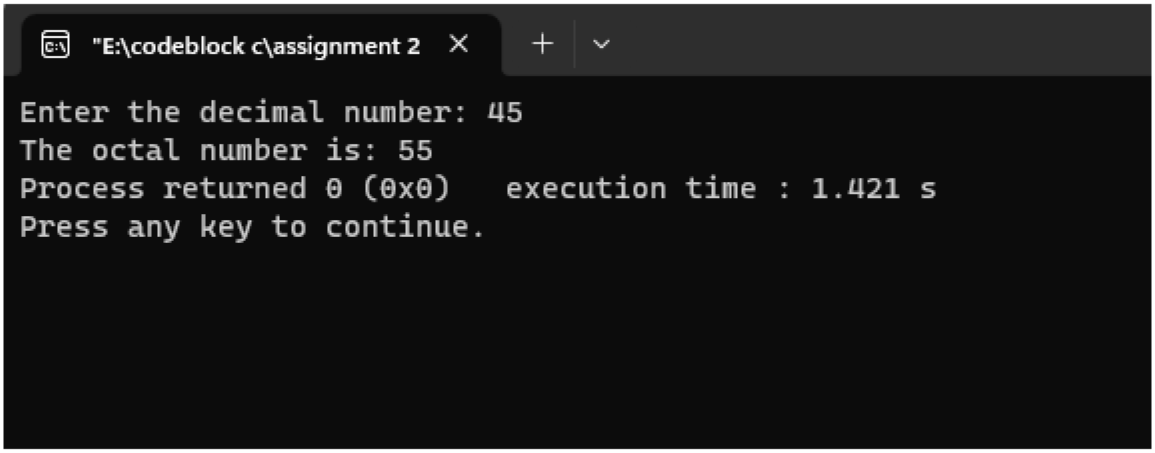
```
#include<stdio.h>
int main()
{
   int n;
   printf("Enter the decimal number: ");
   scanf("%d",&n);
   printf("The hexadecimal number is: %x",n);
   return 0;

}
```



```
Enter the decimal number: 45
The hexadecimal number is: 2d
Process returned 0 (0x0)   execution time : 2.046 s
Press any key to continue.
```

20.Decimal to octal

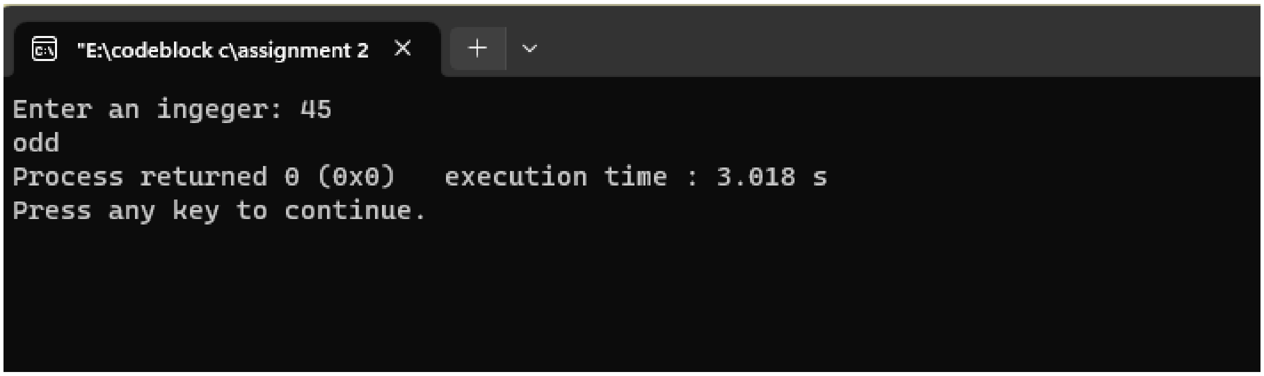
```
#include<stdio.h>
int main()
{
   int n;
   printf("Enter the decimal number: ");
   scanf("%d",&n);
   printf("The octal number is: %o",n);
   return 0;

}
```



```
Enter the decimal number: 45
The octal number is: 55
Process returned 0 (0x0)   execution time : 1.421 s
Press any key to continue.
```

21.Even or Odd number

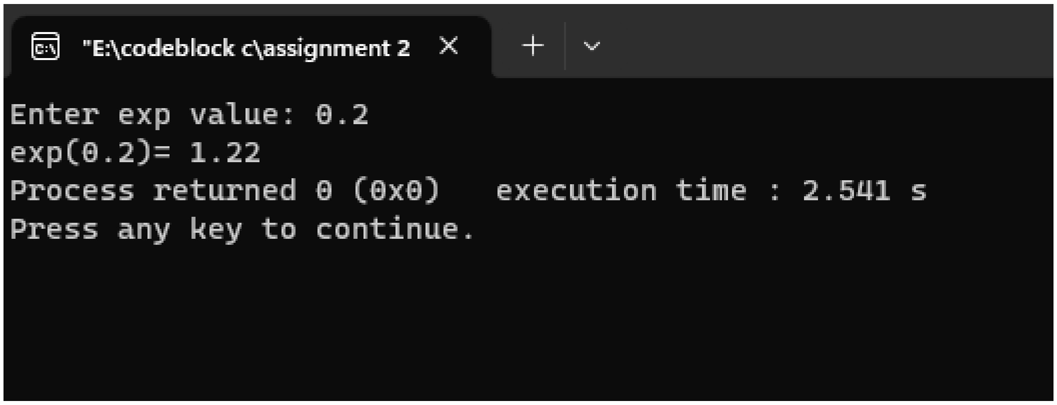
```
#include<stdio.h>
int main()
{   int num;
    printf("Enter an ingeger: ");
    scanf("%d",&num);
    if(num%2==0)
        printf("Even");


    else if(num!=0)
        printf("odd");
        else
            printf("the number is 0");
    return 0;

}
```



```
Enter an ingeger: 45
odd
Process returned 0 (0x0)   execution time : 3.018 s
Press any key to continue.
```

22.Expotential Function

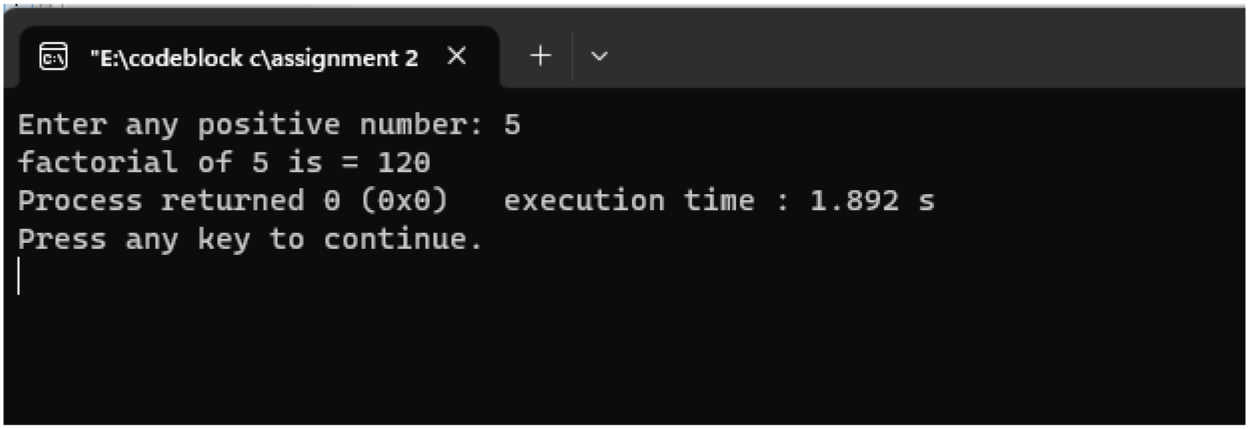
```
#include<stdio.h>
int main()
{
   double result,x;
   printf("Enter exp value: ");
   scanf("%lf",&x);
   result=exp(x);
   printf("exp(%0.1lf)= %0.2lf",x,result);
   return 0;
}
```



```
Enter exp value: 0.2
exp(0.2)= 1.22
Process returned 0 (0x0)   execution time : 2.541 s
Press any key to continue.
```

23.Factorial of a digit

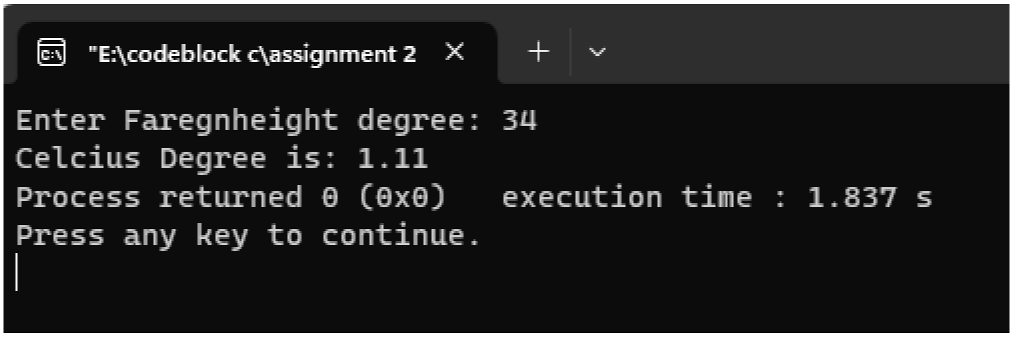
```
#include<stdio.h>
int main()
{
   int n,i,fact=1;
   printf("Enter any positive number: ");
   scanf("%d",&n);
   for(i=1;i<=n;i++)
   {
      fact=fact*i;



   }
   printf("factorial of %lf is = %d",n,fact);
}
```



```
Enter any positive number: 5
factorial of 5 is = 120
Process returned 0 (0x0)   execution time : 1.892 s
Press any key to continue.
```

24.Fahrenheight to celsius

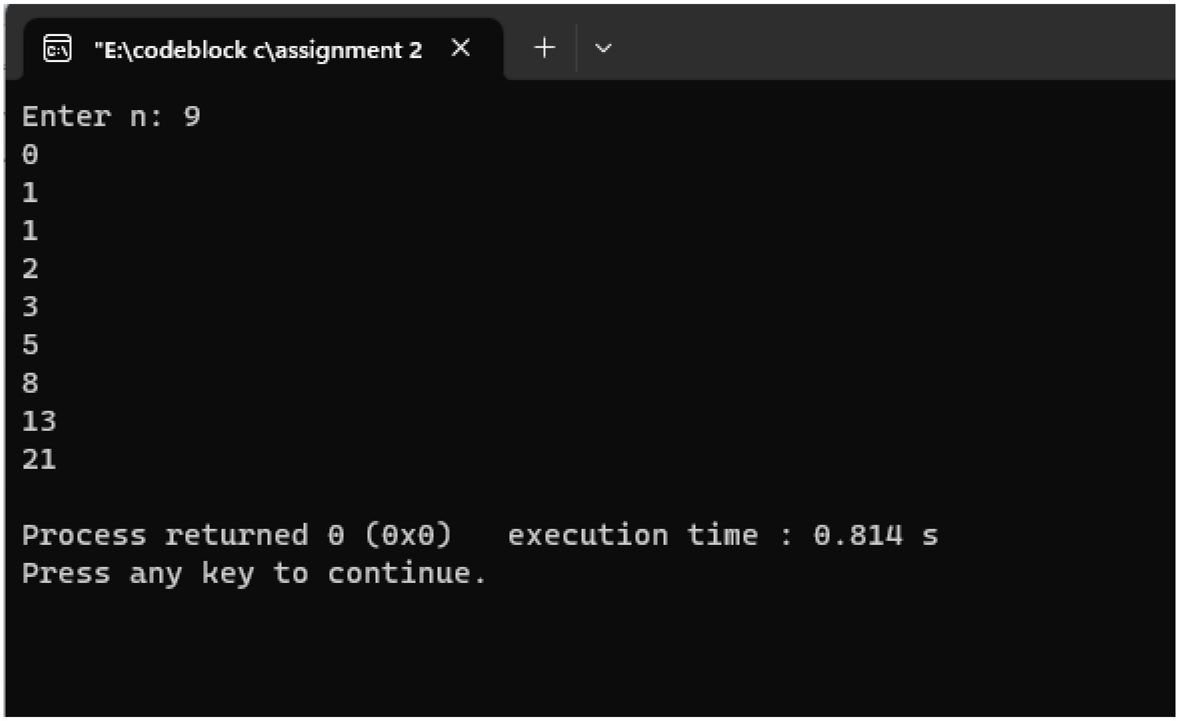
```
#include<stdio.h>
int main()
{
   float c,f;
   printf("Enter Faregnheight degree: ");
   scanf("%f",&f);
   c=(((f-32)*5)/9);
   printf("Celcius Degree is: %0.2f",c);

}
```



```
Enter Faregnheight degree: 34
Celcius Degree is: 1.11
Process returned 0 (0x0)   execution time : 1.837 s
Press any key to continue.
```

25.Fibonacci number

```
#include<stdio.h>
int main()
{   //fibonacci number
    int n,i,num1=0,num2=1,fib;
    printf("Enter n: ");
    scanf("%d",&n);
    printf("%d\n",num1);
    printf("%d\n",num2);
    for(i=0;i<=n-3;i++)
    {
        fib=num1+num2;
        num1=num2;
        num2=fib;
        printf("%d\n",fib);
    }

}
```



```
Enter n: 9
0
1
1
2
3
5
8
13
21

Process returned 0 (0x0)   execution time : 0.814 s
Press any key to continue.
```

26.Find the number position

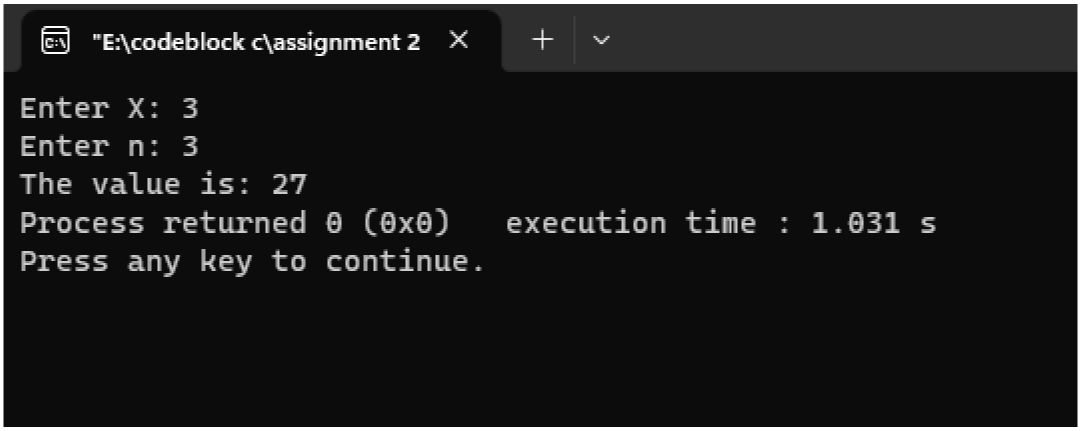
```
#include<stdio.h>
int main()
{

    int position=-1,i,n,a[100],value,pos;
    printf("Enter n: ");
    scanf("%d",&n);
    for(i=0;i<n;i++)
    {
        printf("Enter numbers: ");
        scanf("%d",&a[i]);

    }
    printf("Enter the number: ");
    scanf("%d",&value);
    for(i=0;i<n;i++){
    if(value==a[i])
    {
     pos=i+1;
     break;
    }
    }
    if(position==-1)
        printf("not found");
    else
    {
        printf("The position of this number is %d",pos);
    }
    }
```

27.Area of a triangle using function

```
#include<stdio.h>
double areatriangle(double a,double b);
double main()


{
   double height,weight;
   printf("Enter height: ");
   scanf("%lf",&height);
   printf("Enter weight: ");
   scanf("%lf",&weight);
   double area= areatriangle(height,weight);
   printf("The area of the triangle is : %0.2lf",area);
}


(

   return 0.5*a*b ;
)
```

28.Power value using function

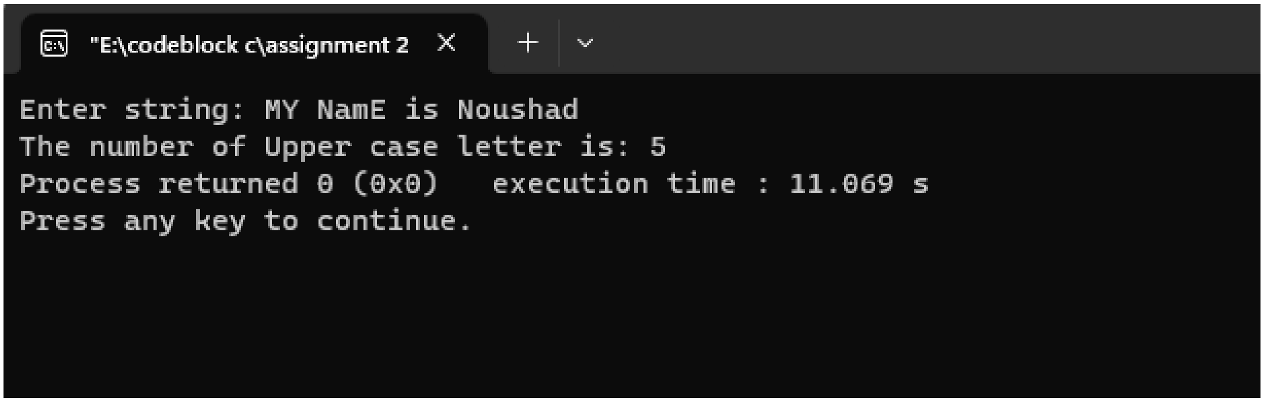
```
#include<stdio.h>
int main()
{
   int a,b;
   printf("Enter X: ");
   scanf("%d",&a);
   printf("Enter n: ");
   scanf("%d",&b);
   int powervalue = value(a,b);
   printf("The value is: %d",powervalue);


}
int value(int x,int n)
{
   return pow(x,n);
}
```



```
Enter X: 3
Enter n: 3
The value is: 27
Process returned 0 (0x0)   execution time : 1.031 s
Press any key to continue.
```

29.String using function

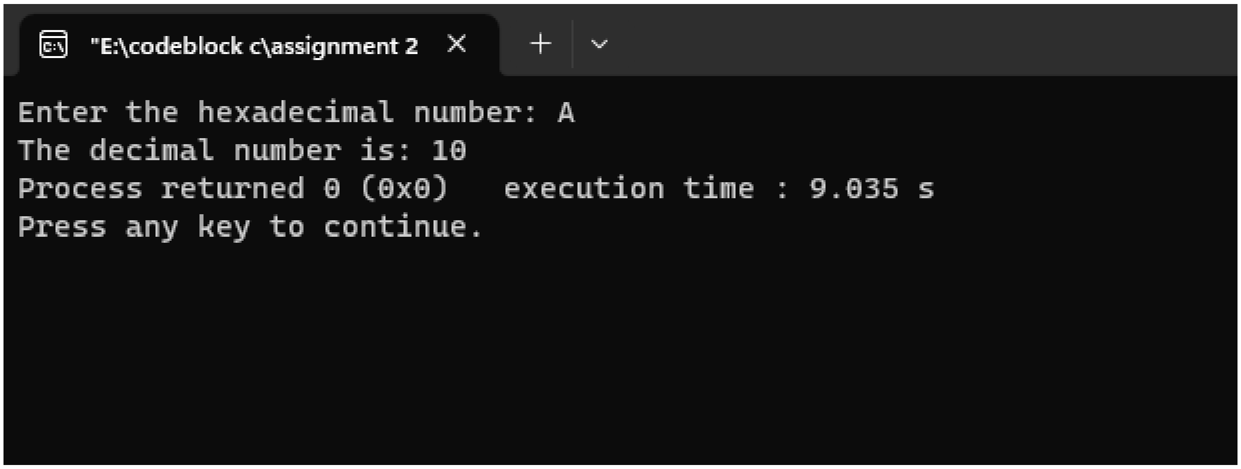
```
#include<stdio.h>
int main()
{
   char s[100];
   printf("Enter string: ");
   gets(s);
   int f = string(s);
   printf("The number of Upper case letter is: %d",f);
}
int string(char x[])
{
   int u=0,l=0,i=0,o=0;
   while(x[i]!='\0')
   {
    if(x[i]>=65 && x[i]<=90 )
    { u++;}
    else if(x[i]>=97 && x[i]<=122)
    {
       l++;
    }
    else
    {
       o++;
    }
    i++;
    }
   return u;
```



```
Enter string: MY NamE is Noushad
The number of Upper case letter is: 5
Process returned 0 (0x0)   execution time : 11.069 s
Press any key to continue.
```

30.Hexadecimal to decimal

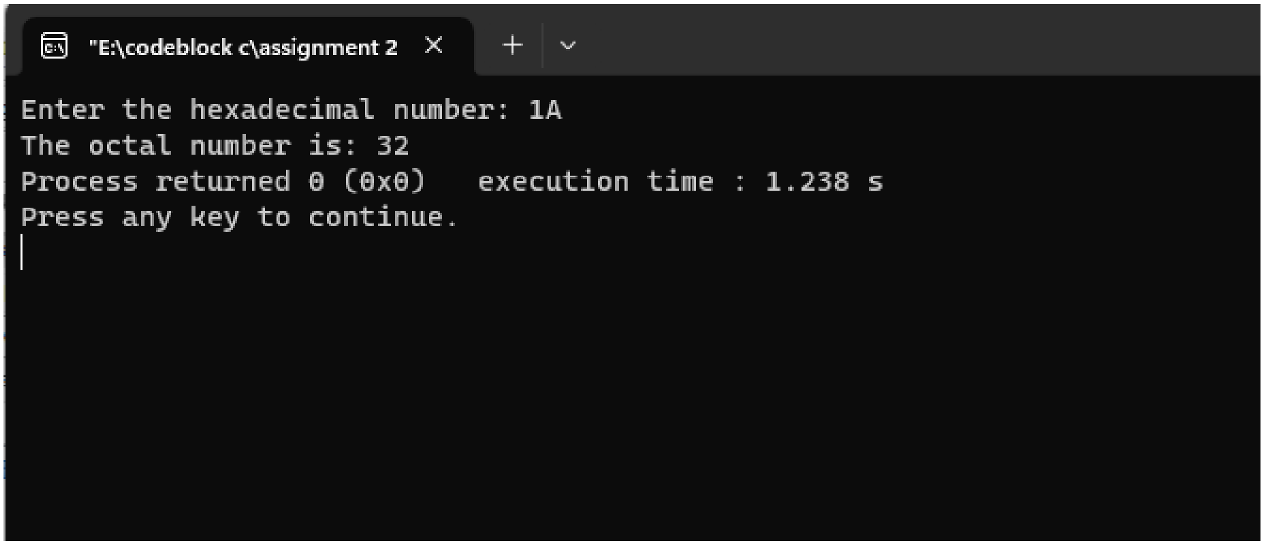
```
#include<stdio.h>
int main()
{
   int n;
   printf("Enter the hexadecimal number: ");
   scanf("%x",&n);
   printf("The decimal number is: %d",n);
   return 0;

}
```



```
Enter the hexadecimal number: A
The decimal number is: 10
Process returned 0 (0x0)   execution time : 9.035 s
Press any key to continue.
```

31.Hexadecimal to octal

```
#include<stdio.h>
int main()
{
   int n;
   printf("Enter the hexadecimal number: ");
   scanf("%x",&n);
   printf("The octal number is: %o",n);
   return 0;

}
```

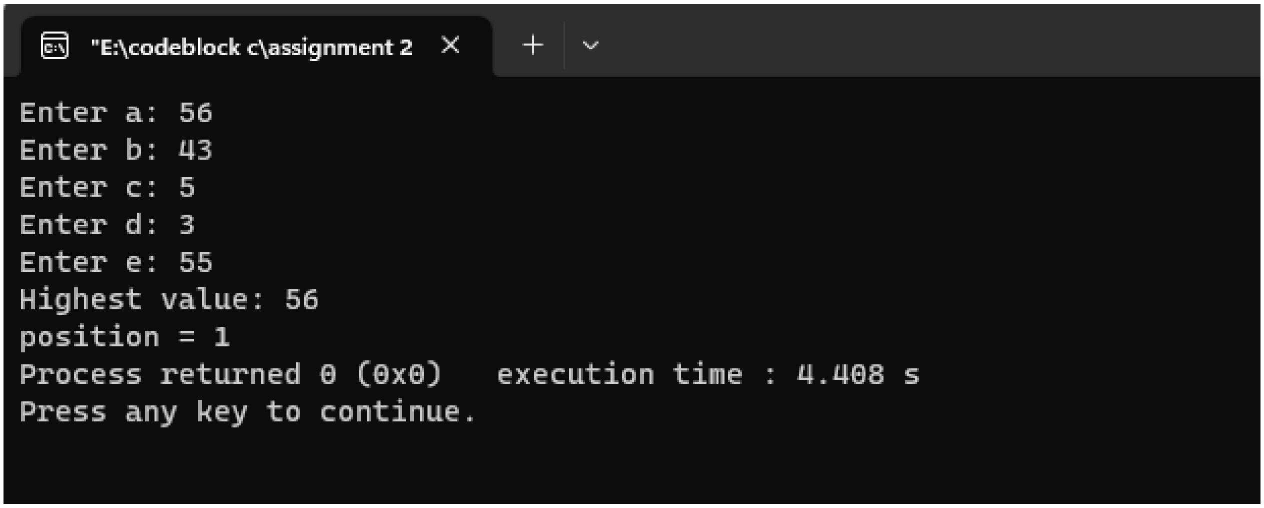


```
Enter the hexadecimal number: 1A
The octal number is: 32
Process returned 0 (0x0)   execution time : 1.238 s
Press any key to continue.
```

32.Higher number and position from 5 number

```
#include<stdio.h>
int main()
{
   int a,b,c,d,e;
   printf("Enter a: ");
   scanf("%d",&a);

   printf("Enter b: ");
   scanf("%d",&b);

   printf("Enter c: ");
   scanf("%d",&c);

   printf("Enter d: ");
   scanf("%d",&d);

   printf("Enter e: ");
   scanf("%d",&e);

   if(a>b&&a>c&&a>d&&a>e)
   {
      printf("Highest value: %d\nposition = 1",a);
   }
   else if(b>a&&b>c&&b>d&&b>e)
   {
      printf("Highest value: %d\nposition = 2",b);
   }
   else if(c>b&&c>a&&c>d&&c>e)
   {
      printf("Highest value: %d\nposition = 3",c);
   }
   else if(d>b&&d>c&&d>a&&d>e)
   {
      printf("Highest value: %d\nposition = 4",d);
   }
   else
   {
      printf("Highest value: %d\nposition = 5",e);
```

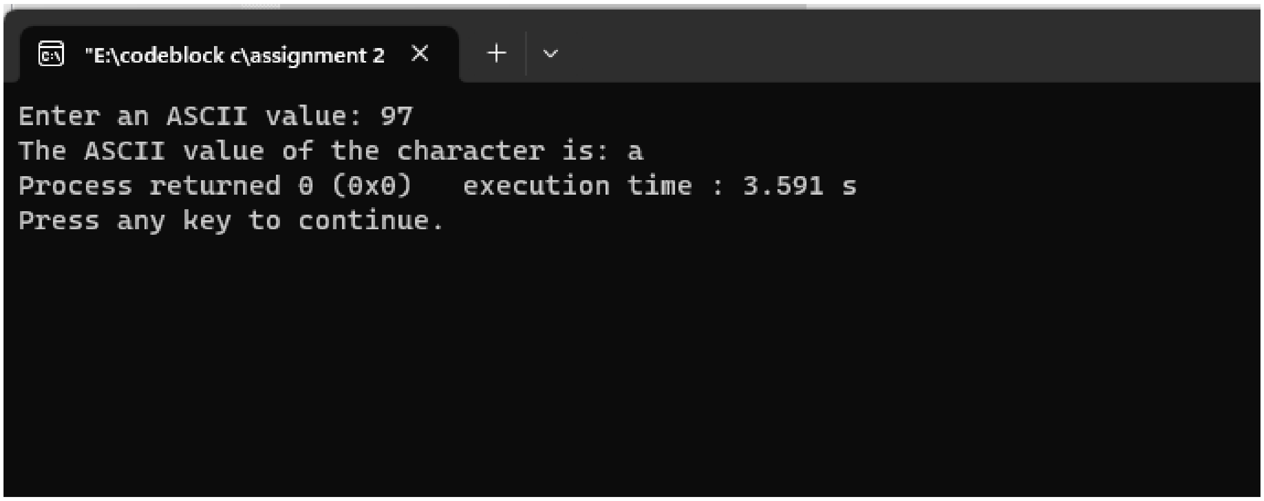
```
    }
    return 0;
}
```



```
Enter a: 56
Enter b: 43
Enter c: 5
Enter d: 3
Enter e: 55
Highest value: 56
position = 1
Process returned 0 (0x0)   execution time : 4.408 s
Press any key to continue.
```

33.Integer number to ASCII value

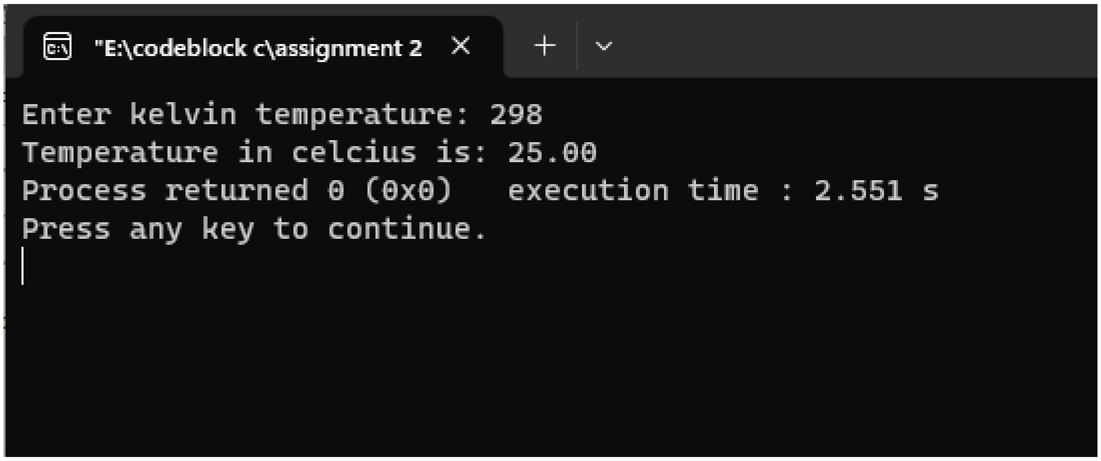
```
#include<stdio.h>
int main()
{   char n;
    printf("Enter an ASCII value: ");
    scanf("%d",&n);
    printf("The ASCII value of the character is: %c",n);
    return 0;
}
```



```
Enter an ASCII value: 97
The ASCII value of the character is: a
Process returned 0 (0x0)   execution time : 3.591 s
Press any key to continue.
```

34.Kelvin to Celsius

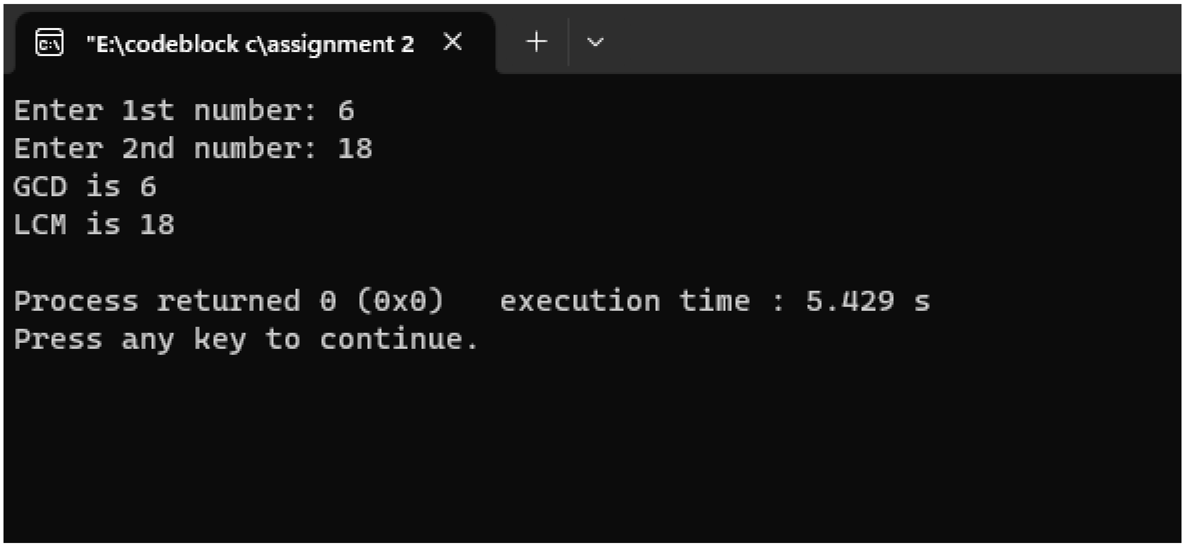
```
#include<stdio.h>
int main()
{
    float c,k;
    printf("Enter kelvin temperature: ");
    scanf("%f",&k);
    c=(k-273));
    printf("Temperature in celcius is: %0.2f",c);
    return 0;

}
```



```
Enter kelvin temperature: 298
Temperature in celcius is: 25.00
Process returned 0 (0x0)   execution time : 2.551 s
Press any key to continue.
```

35.LCM and GCD

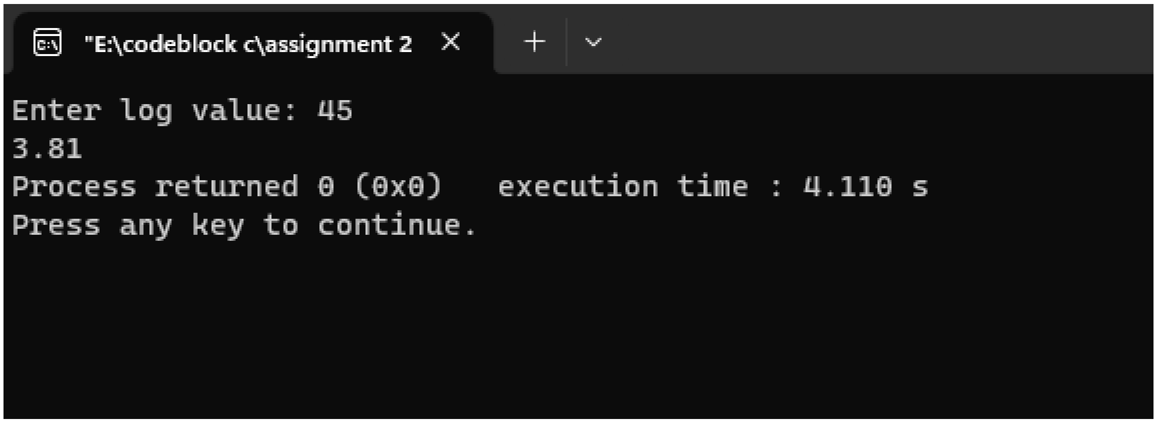
```
#include<stdio.h>
int main()
{
   int n1,n2,rem,lcm,gcd,num1,num2;
   printf("Enter 1st number: ");
   scanf("%d",&num1);
   printf("Enter 2nd number: ");
   scanf("%d",&num2);
   n1=num1;
   n2=num2;
   while(n2!=0)
   {
      rem=n1%n2;
      n1=n2;
      n2=rem;

   }
   gcd=n1;
   lcm=((num1*num2)/gcd);
   printf("GCD is %d\n",gcd);
   printf("LCM is %d\n",lcm);

}
```



```
Enter 1st number: 6
Enter 2nd number: 18
GCD is 6
LCM is 18

Process returned 0 (0x0)   execution time : 5.429 s
Press any key to continue.
```

36.Use of Log function

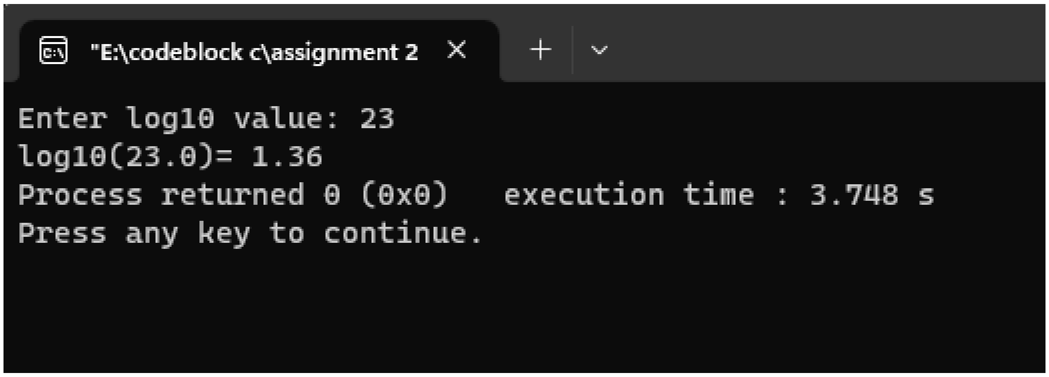
```
#include<stdio.h>
int main()
{
   double result,x;
   printf("Enter log value: ");
   scanf("%lf",&x);
   result=log(x);
   printf("%0.2lf",result);
   return 0;
}
```



```
Enter log value: 45
3.81
Process returned 0 (0x0)   execution time : 4.110 s
Press any key to continue.
```

37.Using of Log10 function

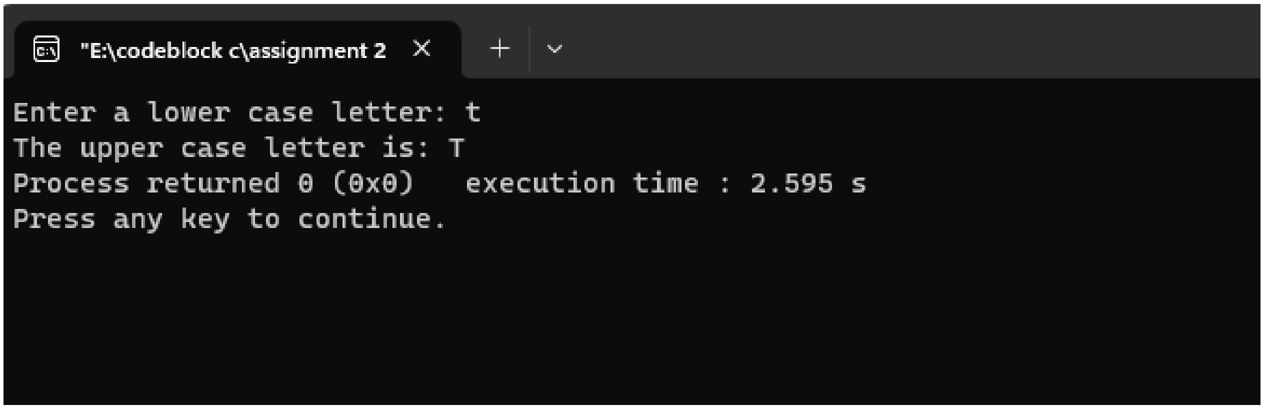
```
#include<stdio.h>
int main()
{
   double result,x;
   printf("Enter log10 value: ");
   scanf("%lf",&x);
   result=log10(x);
   printf("log10(%0.1lf)= %0.2lf",x,result);
   return 0;
}
```



```
Enter log10 value: 23
log10(23.0)= 1.36
Process returned 0 (0x0)   execution time : 3.748 s
Press any key to continue.
```

38.Lower case letter to upper case letter without using function

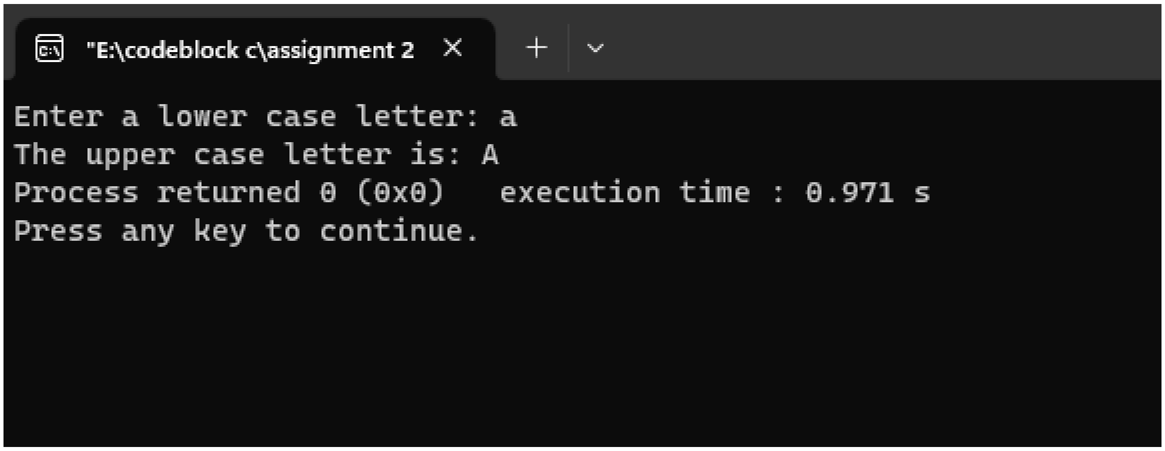
```
#include<stdio.h>
int main()
{

    char lower;
    printf("Enter a lower case letter: ");
    scanf("%c",&lower);
    printf("The upper case letter is: %c",lower-32);
}
```



```
Enter a lower case letter: t
The upper case letter is: T
Process returned 0 (0x0)   execution time : 2.595 s
Press any key to continue.
```

39.Lower case letter to upper case letter using library function

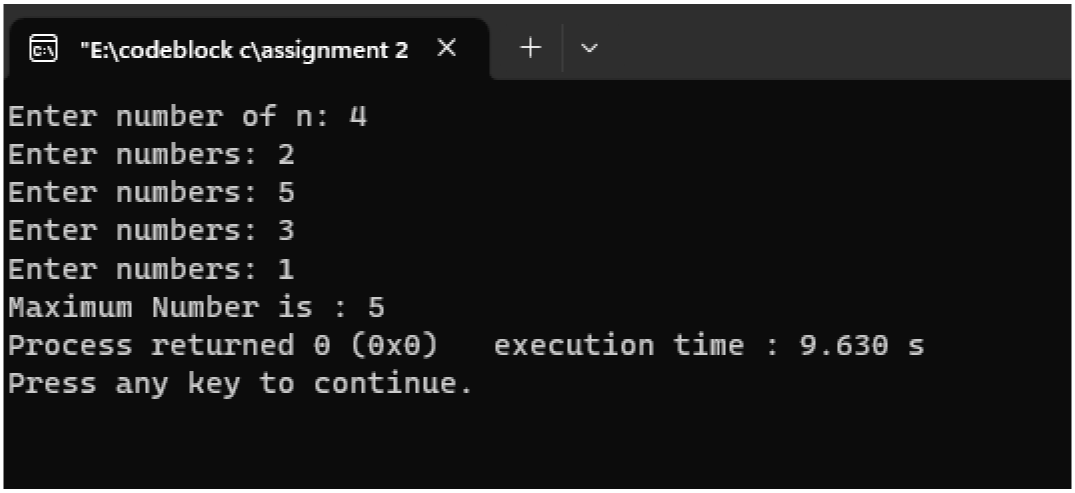
```
#include<stdio.h>
int main()
{

   char lower,upper;
   printf("Enter a lower case letter: ");
   scanf("%c",&lower);
   upper = toupper(lower);
   printf("The upper case letter is: %c",upper);
}
```



```
Enter a lower case letter: a
The upper case letter is: A
Process returned 0 (0x0)   execution time : 0.971 s
Press any key to continue.
```

40.Maximum number from array

```
#include<stdio.h>
int main()
{

   int n,a[100],i;
   printf("Enter number of n: ");
   scanf("%d",&n);
   for(i=0;i<n;i++)
   {
      printf("Enter numbers: ");
      scanf("%d",&a[i]);
   }
   int max= a[0];
   for(i=1;i<n;i++)
   {
      if(max<a[i])
      {
         max=a[i];
      }
   }
   printf("Maximum Number is : %d",max);
}
```



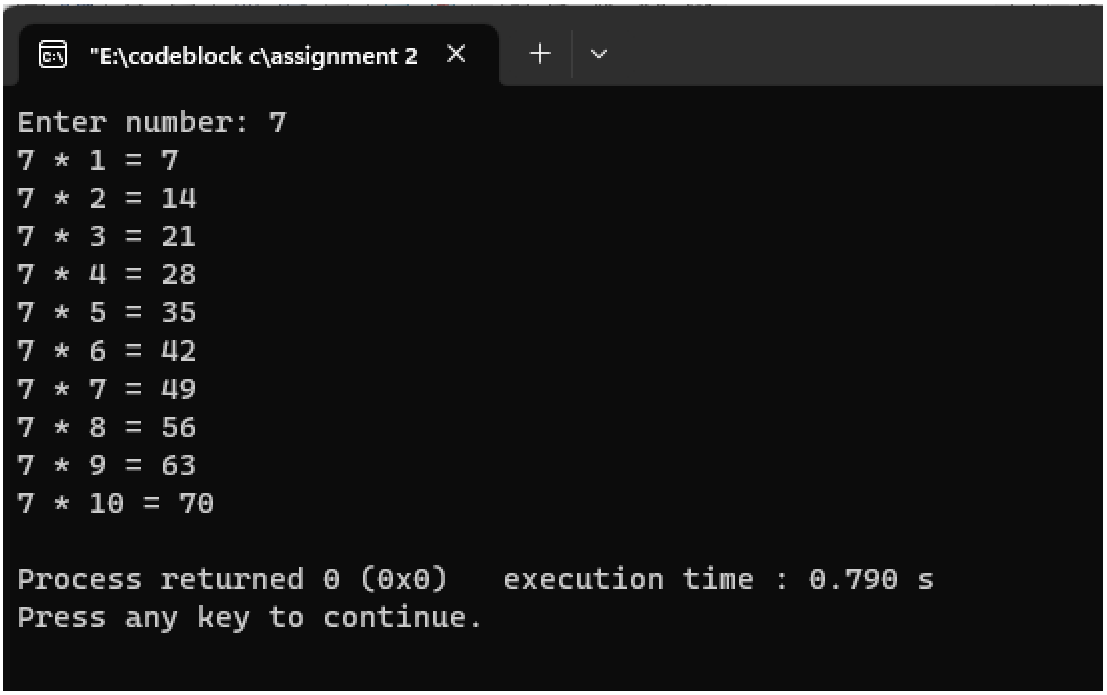
```
Enter number of n: 4
Enter numbers: 2
Enter numbers: 5
Enter numbers: 3
Enter numbers: 1
Maximum Number is : 5
Process returned 0 (0x0)   execution time : 9.630 s
Press any key to continue.
```

41.Menu based temperature converter

```
#include<stdio.h>
int main()

   int choice;
   float c,f;
   printf("Temperature converter manu:\n1.Fahrenheit To Celsius.\n2.Celsius To
Fahrenheit.\nEnter Your choice: ");
   scanf("%d",&choice);
   switch(choice)
   {
   case 1:
      {

   printf("Enter Faregnheight degree: ");
   scanf("%f",&f);
   c=(((f-32)*5)/9);
   printf("Celcius Degree is: %0.2f",c);

      }
      break;
   case 2:
      {

   printf("Enter Celcius degree: ");
   scanf("%f",&c);
   f=(((9*c)/5)+32);
   printf("Fareignheight Degree is: %0.2f",f);

      }
      break;
   }

}
```

42.Multiplication table

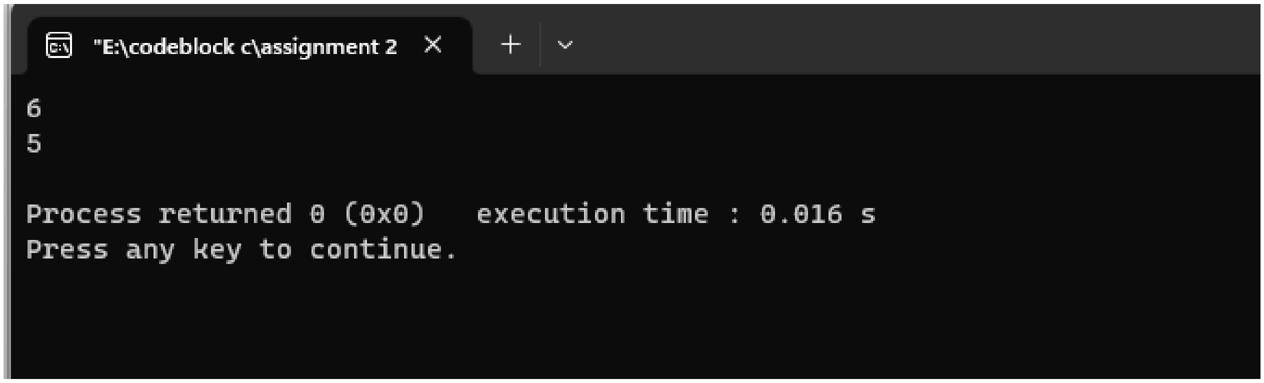
```
#include<stdio.h>
int main()
{
   int n,i;
   printf("Enter number: ");
   scanf("%d",&n);
   for(i=1;i<=10;i++)
   {
      printf("%d * %d = %d",n,i,n*i);
      printf("\n");
   }

}
```



```
Enter number: 7
7 * 1 = 7
7 * 2 = 14
7 * 3 = 21
7 * 4 = 28
7 * 5 = 35
7 * 6 = 42
7 * 7 = 49
7 * 8 = 56
7 * 9 = 63
7 * 10 = 70

Process returned 0 (0x0)   execution time : 0.790 s
Press any key to continue.
```

43.Copy one variable to another variable

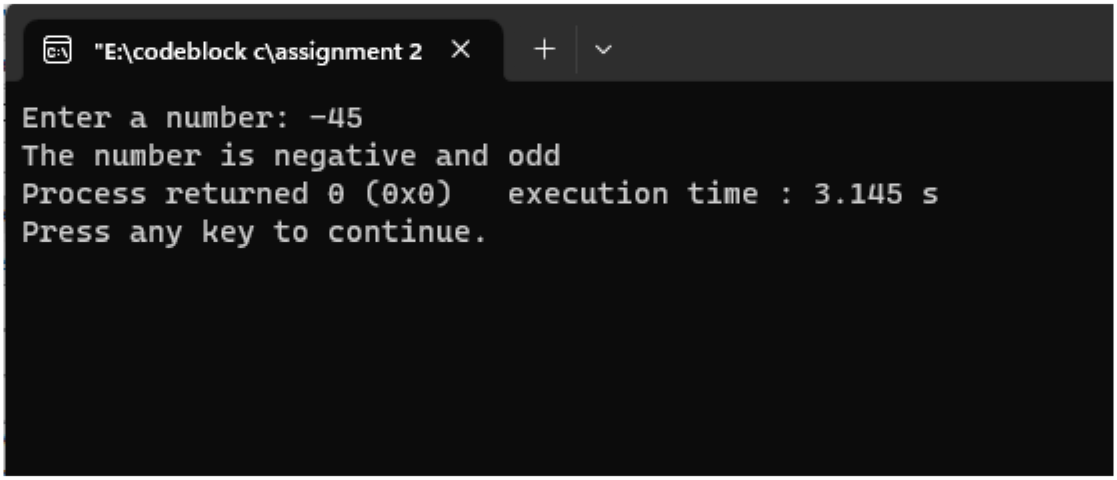
```
#include<stdio.h>
int main()
{
    int n,x=5,num,y;
    n=6;
    num=n;
    n=x;
    printf("%d\n",num);
 printf("%d\n",n);



    }
```



```
6
5

Process returned 0 (0x0)   execution time : 0.016 s
Press any key to continue.
```

44.Value is positive or negative or even or odd

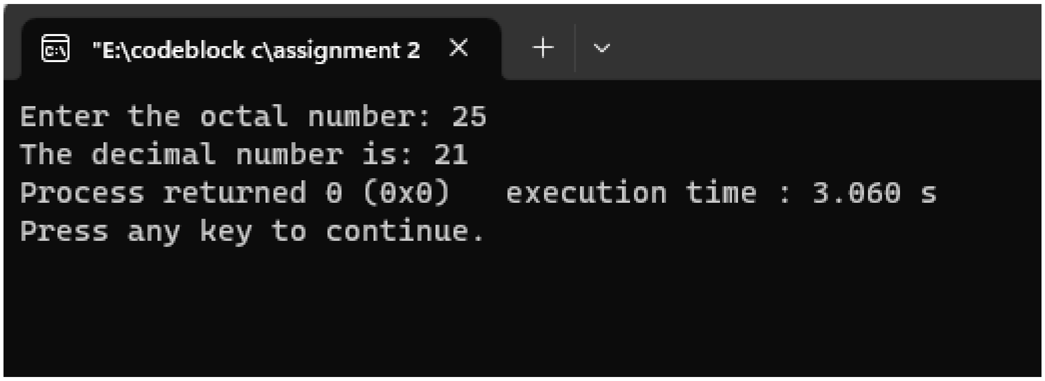
```
#include<stdio.h>
int main()
{
   int n;
   printf("Enter a number: ");
   scanf("%d",&n);
   if(n>=0 && n%2==0){
      printf("The number is positive and even");
   }
   else if(n<0 && n%2==0){
      printf("The number is negative and even");
   }
   else if(n>=0 && n%2!=0){
      printf("The number is positive and odd");
   }
   else{
      printf("The number is negative and odd");
   }

}
```



```
Enter a number: -45
The number is negative and odd
Process returned 0 (0x0)   execution time : 3.145 s
Press any key to continue.
```

45.Octal to decimal

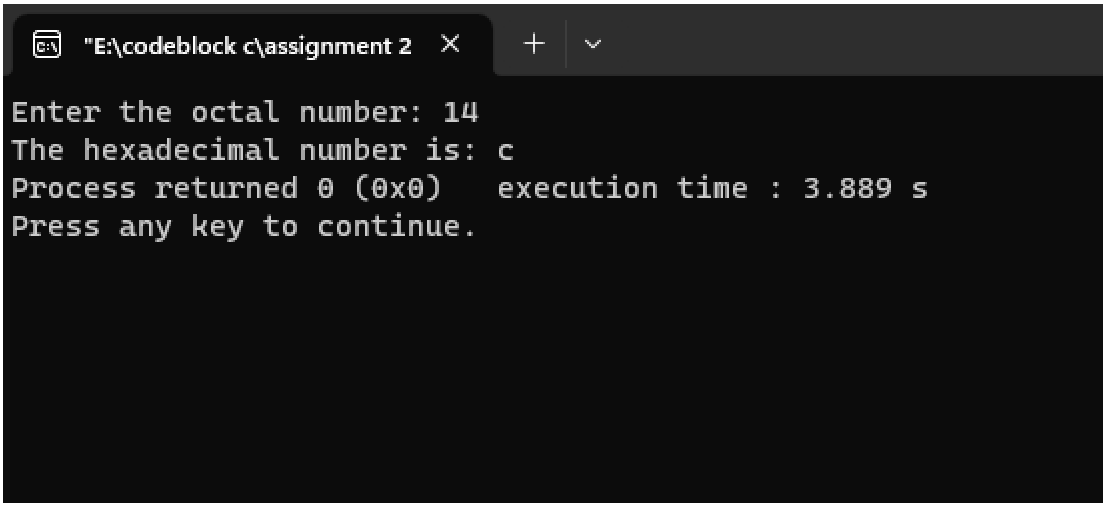
```
#include<stdio.h>
int main()
{
   int n;
   printf("Enter the octal number: ");
   scanf("%o",&n);
   printf("The decimal number is: %d",n);
   return 0;

}
```



```
Enter the octal number: 25
The decimal number is: 21
Process returned 0 (0x0)   execution time : 3.060 s
Press any key to continue.
```

46.Octal to hexadecimal

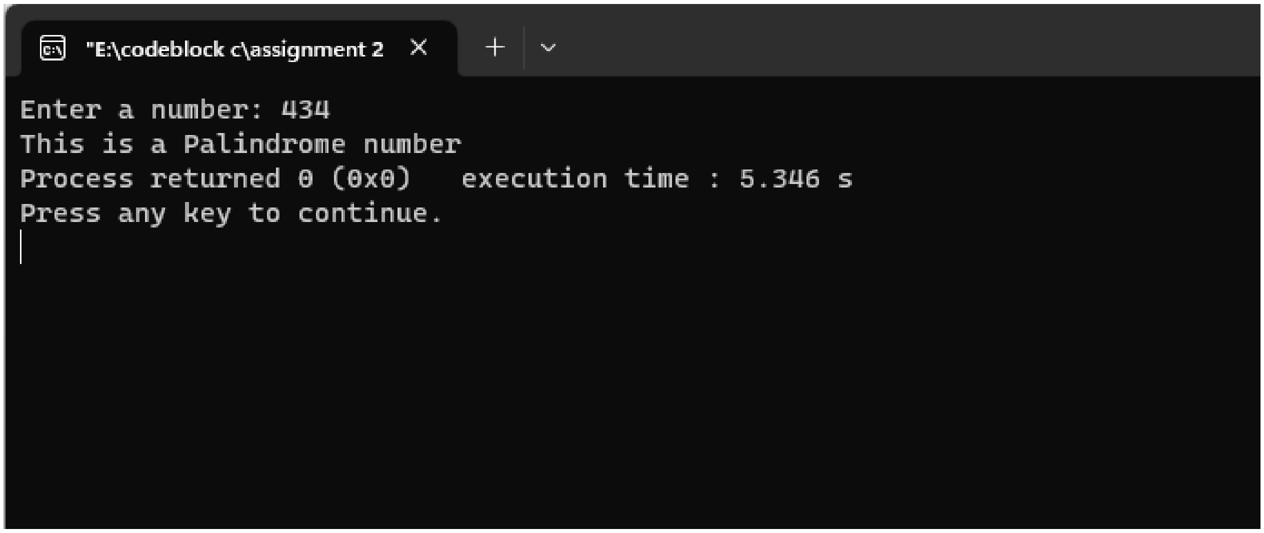
```
#include<stdio.h>
int main()
{
   int n;
   printf("Enter the octal number: ");
   scanf("%o",&n);
   printf("The hexadecimal number is: %x",n);
   return 0;

}
```



```
Enter the octal number: 14
The hexadecimal number is: c
Process returned 0 (0x0)   execution time : 3.889 s
Press any key to continue.
```

47.Palindrome number or not

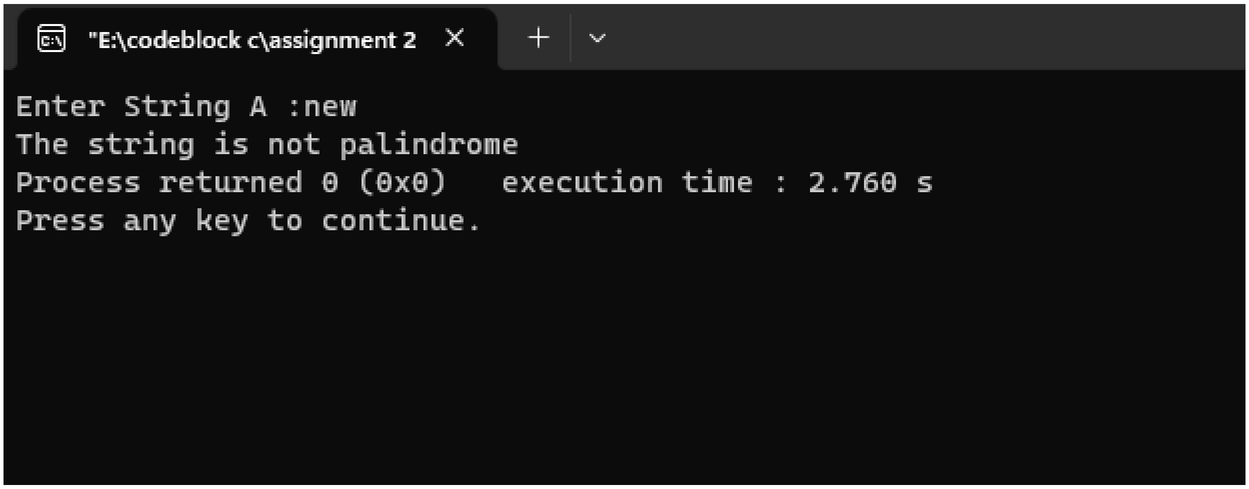
```
#include<stdio.h>
int main()
{
   int n,num,r,sum=0;
   printf("Enter a number: ");
   scanf("%d",&num);
   n=num;
   while(n!=0)
   {
      r=n%10;
      sum=sum*10+r;
      n=n/10;

   }
   if(sum==num)
      printf("This is a Palindrome number");
   else
      printf("Not a palimdrome number");
   return 0;

}
```



```
Enter a number: 434
This is a Palindrome number
Process returned 0 (0x0)   execution time : 5.346 s
Press any key to continue.
```

48.Palindrome number using String

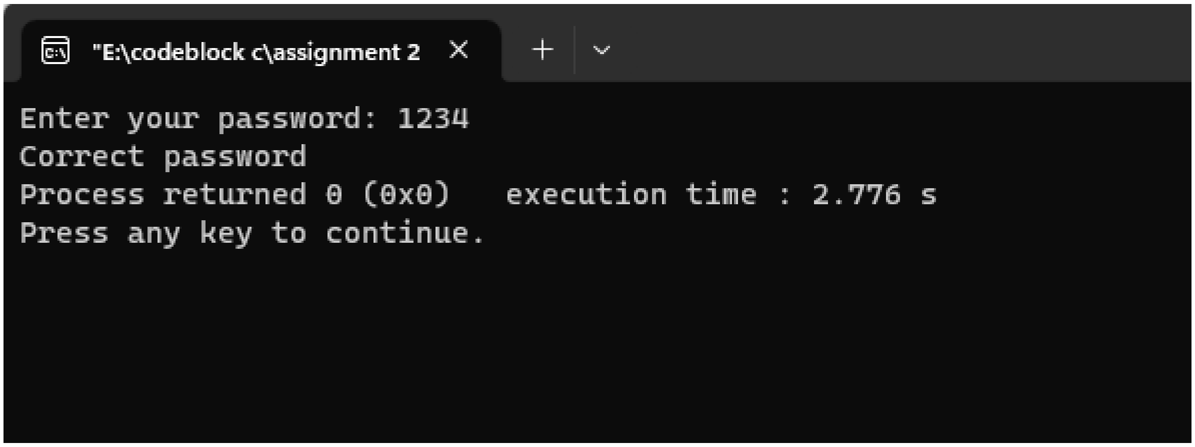
```
#include<stdio.h>
int main()
{
  char b[100],a[100];
  printf("Enter String A :");
  gets(a);

  strcpy(b,a);



  if(b==(strrev(a)))
  {
    printf("String is palindrome");

  }
  else
    printf("The string is not palindrome");

}
```



```
Enter String A :new
The string is not palindrome
Process returned 0 (0x0)   execution time : 2.760 s
Press any key to continue.
```

49.Password 1234

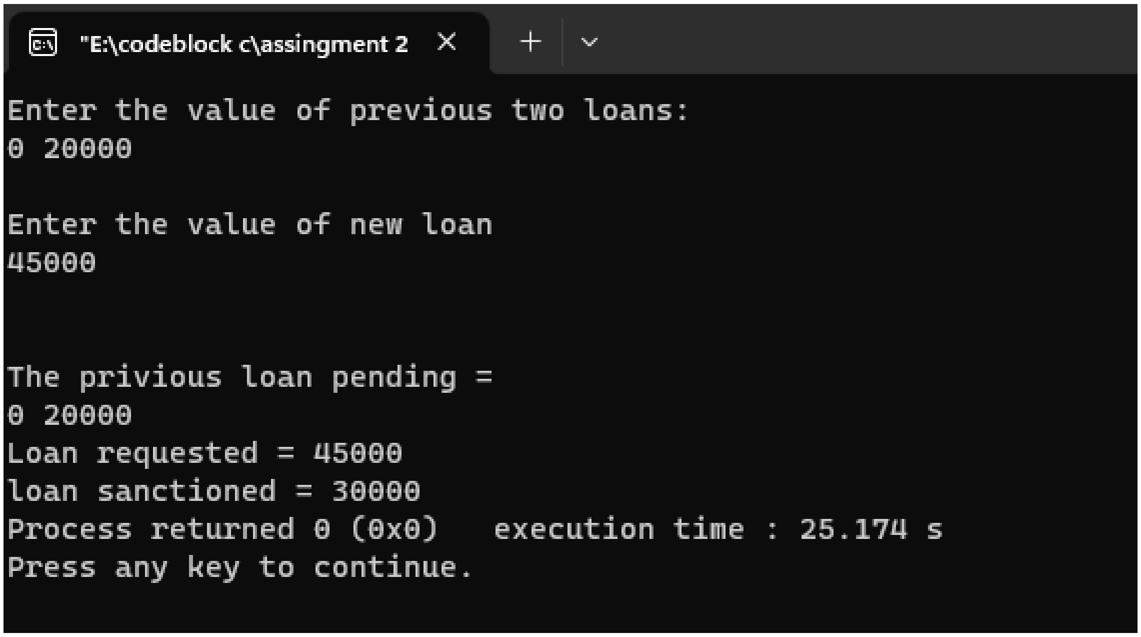
```
#include<stdio.h>
int main()
{
   int pass;
   printf("Enter your password: ");
   scanf("%d",&pass);
   if(pass==1234)
   {
      printf("Correct password");

   }
   else
   {
      printf("Incorrect Password");
   }
   return 0;
   }
```



```
Enter your password: 1234
Correct password
Process returned 0 (0x0)   execution time : 2.776 s
Press any key to continue.
```

50.Loan from a company

```
#define MAXLOAN 50000
main()
{
   long int loan1,loan2,loan3,sancloan,sum23;
   printf("Enter the value of previous two loans: \n");
   scanf("%ld %ld",&loan1,&loan2);
   printf("\nEnter the value of new loan\n");
   scanf("%ld",&loan3);
   sum23=loan2+loan3;
   sancloan = (loan1>0)?0:((sum23>MAXLOAN)?MAXLOAN-loan2:loan3);
   printf("\n\n");
   printf("The privious loan pending = \n%ld %ld\n",loan1,loan2);
   printf("Loan requested = %ld\n",loan3);
   printf("loan sanctioned = %ld",sancloan);

}
```



```
Enter the value of previous two loans:
0 20000

Enter the value of new loan
45000


The privious loan pending =
0 20000
Loan requested = 45000
loan sanctioned = 30000
Process returned 0 (0x0)   execution time : 25.174 s
Press any key to continue.
```