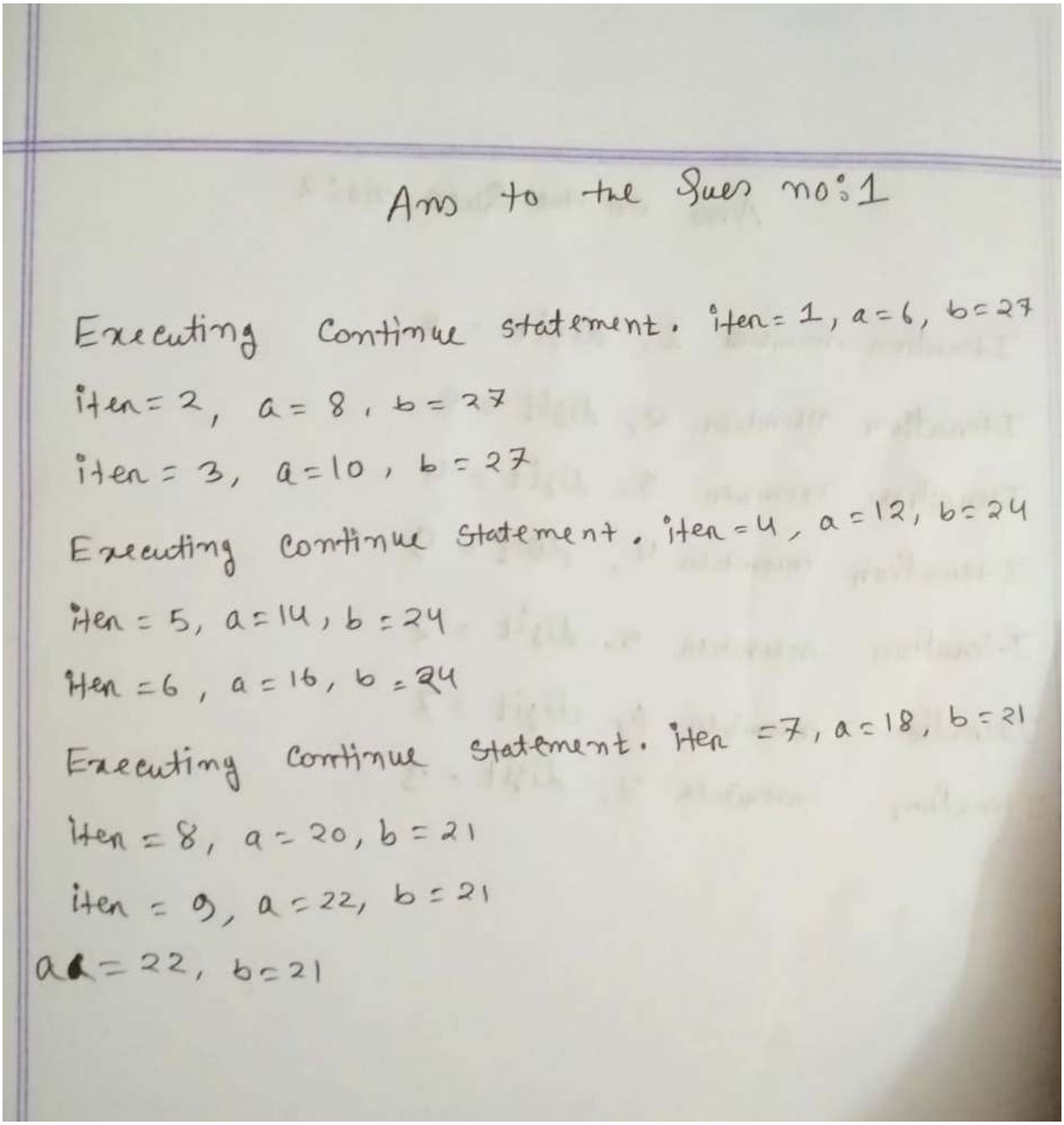
Home Work 4

1.


Ans to the Ques no: 1
Executing Continue statement. iter = 1, a = 6, b = 27
iter = 2, a = 8, b = 27
iter = 3, a = 10, b = 27
Executing Continue statement. iter = 4, a = 12, b = 24
iter = 5, a = 14, b = 24
iter = 6, a = 16, b = 24
Executing Continue statement. iter = 7, a = 18, b = 21
iter = 8, a = 20, b = 21
iter = 9, a = 22, b = 21
a = 22, b = 21

2.

Ans to the Ques no: 2

Enter a number: 3729485

Iteration number 1, digit = 5

Iteration number 2, digit = 8

Iteration number 3, digit = 4

Iteration number 4, digit = 9

Iteration number 5, digit = 2

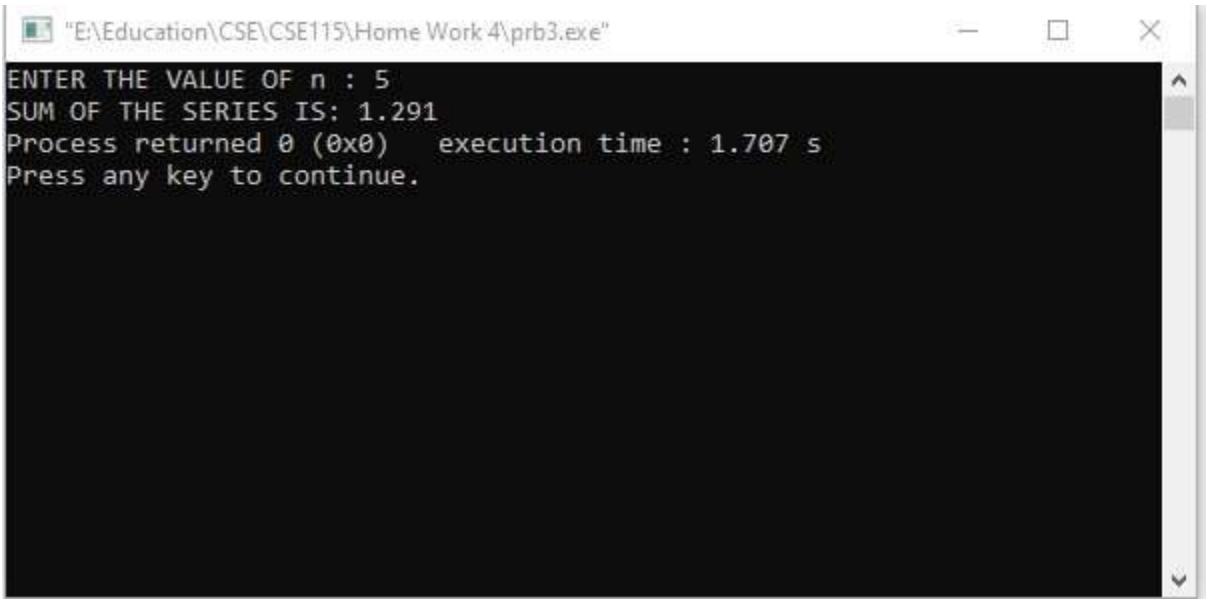
Iteration number 6, digit = 7

Iteration number 7, digit = 3

3.

```
#include <math.h>
#include <stdio.h>
double Series(int n)
{
  int i;
  double sums = 0.0, ser;
  for (i = 1; i <= n; ++i) {
     ser = 1 / pow(i, i);
     sums += ser;
  }
  return sums;
}
int main()
{
int n;
printf("ENTER THE VALUE OF n : ");
scanf("%d",&n);
  double res = Series(n);
  printf("SUM OF THE SERIES IS: %.3f", res);
  return 0;
}
```

Output:

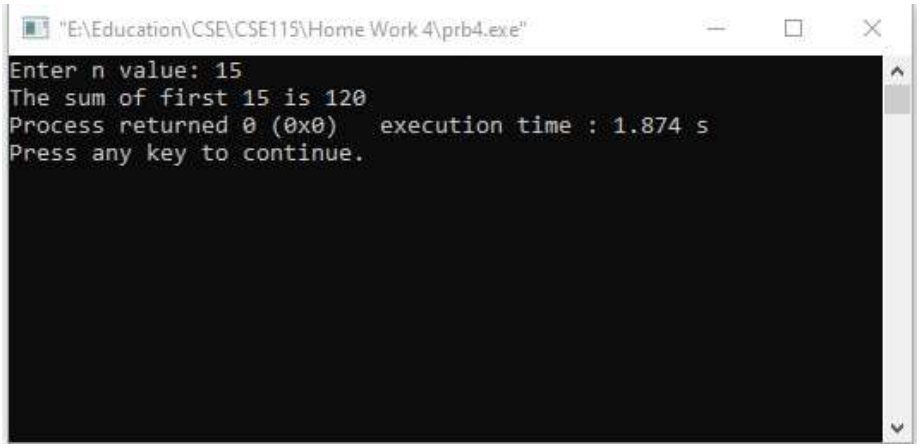


4.

```
#include <stdio.h>

int main()
{
int n,i,sum=0;

printf("Enter n value: ");
scanf("%d",&n);
for (i=1;i<=n;i++)
```

```
sum=sum+i;

printf("The sum of first %d is %d",n,sum);

return 0;
}
```

Output:

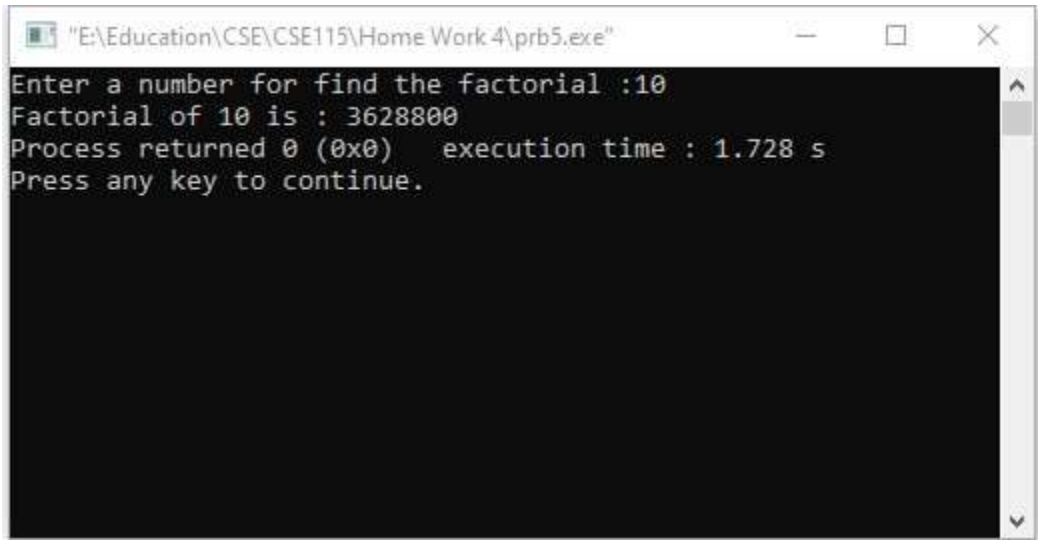


5.

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

int main(){
   int N, facto, count;
   printf("Enter a number for find the factorial :");
   scanf("%d",&N);

   for(count = 1, facto = 1; count <= N; count++){
      facto = facto * count;
   }
```

```
    printf("Factorial of %d is : %d", N, facto);


    return 0;
}
```

Output:

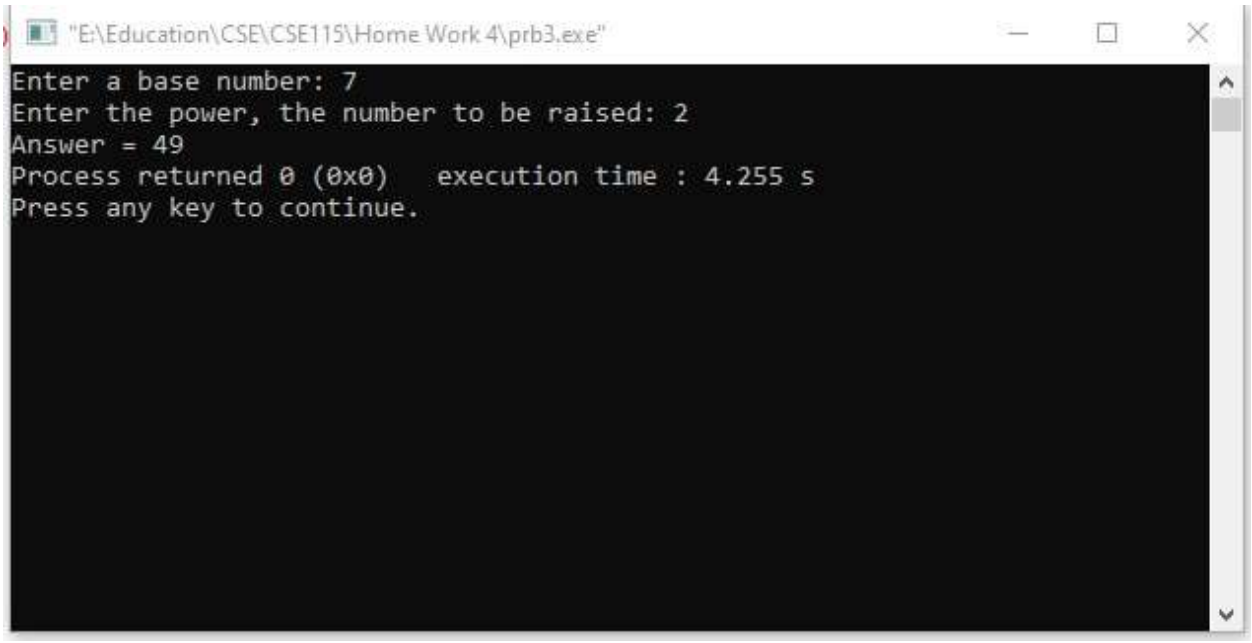


6.

```
#include <stdio.h>

int main() {

int base, power;

double result = 1.0;

printf("Enter a base number: ");

scanf("%d", &base);

printf("Enter the power, the number to be raised: ");
```

```
scanf("%d", &power);


while (power != 0) {
result *= base;
--power;
}
printf("Answer = %.0lf", result);
return 0;
}
```

Output:

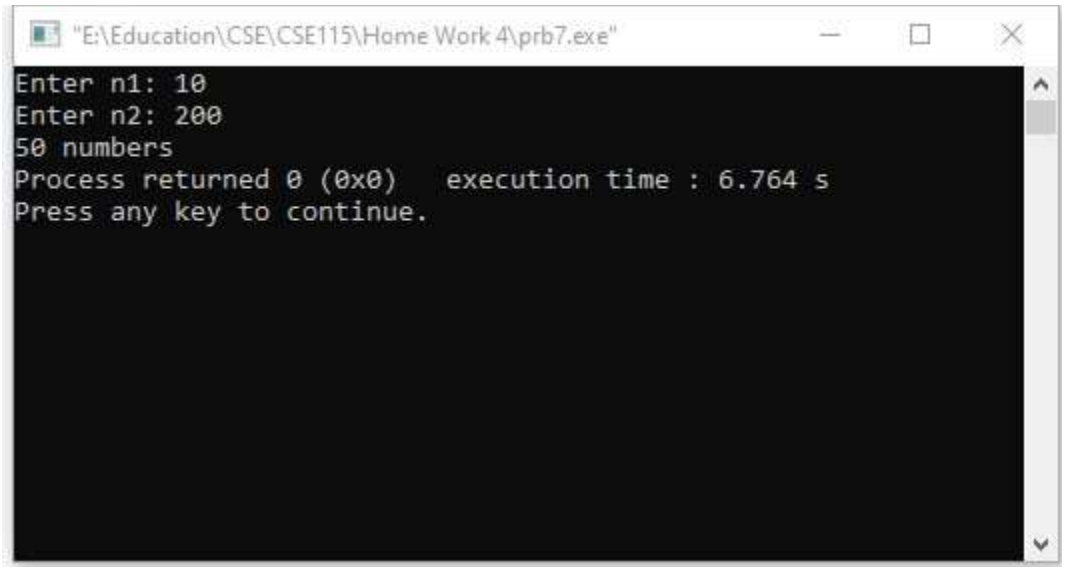


7.

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

```
    int n1, n2;
    printf("Enter n1: ");
    scanf("%d",&n1);
    printf("Enter n2: ");
    scanf("%d",&n2);

    int temp;
    if(n1>n2)
    {
       temp=n2;
       n2=n1;
       n1=temp;
    }

    int i=0;
    int count=0;
    for(i=n1+1;i<n2;i++)
    {

       if(i%3==0&&i%5!=0)
       {
          count++;
       }
    }

    printf("%d numbers",count);
}
```

Output:

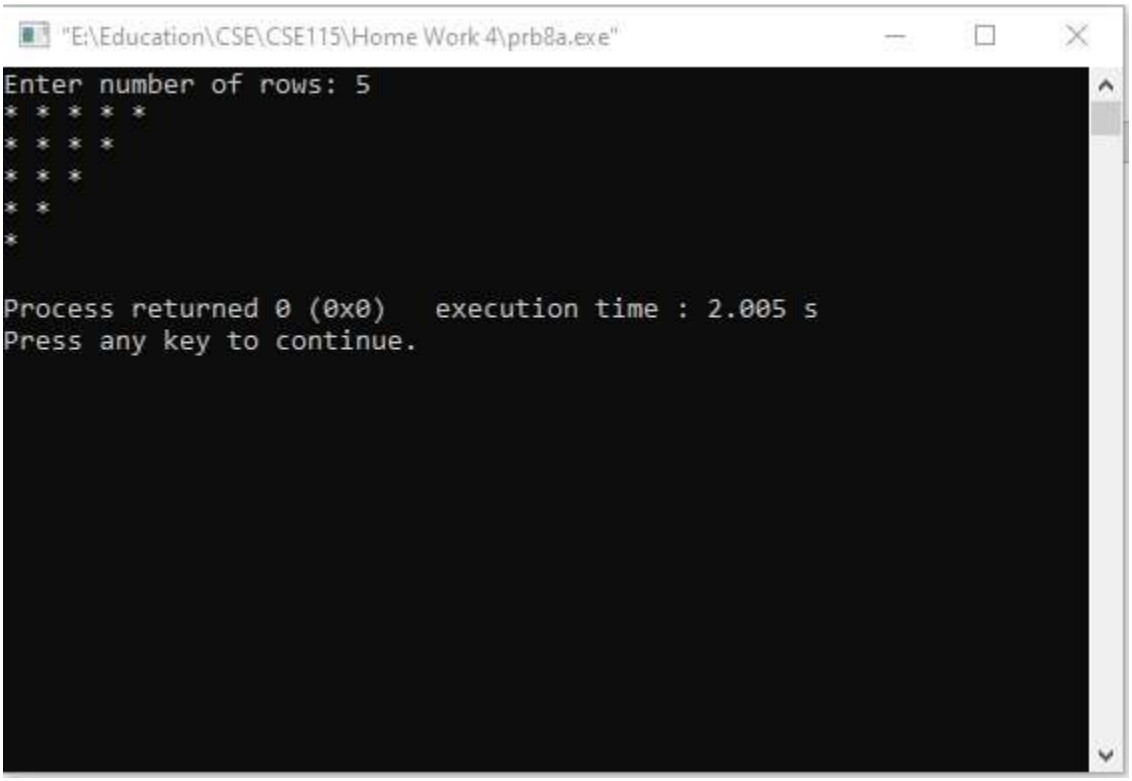


8.

a)

```
#include<stdio.h>
int main()
{
   int i,j,n;
   printf("Enter number of rows: ");
   scanf("%d",&n);
   if(n%2!=0)
   {
      for(i=n;i>=1;i--)
      {
         for(j=1;j<=i;j++)
         {
            printf("* ");
         }
         printf("\n");
      }
   }
   else
```

```
      printf("Enter a odd number");
  return 0;
}
```
Output:

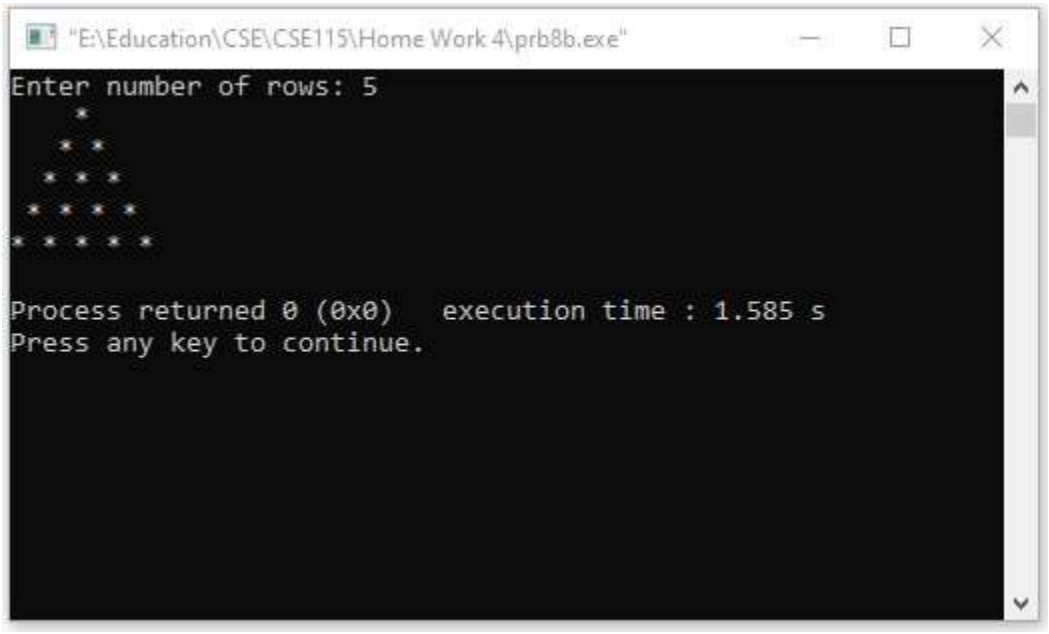


b)

```
#include<stdio.h>
#include<conio.h>
int main()
{
int n, s, i, j;
printf("Enter number of rows: ");
scanf("%d",&n);
for(i = 1; i <= n; i++)
{
```

```
for(s = i; s < n; s++)
printf(" ");

for(j = 1; j <= i; j++)
printf("* ");

printf("\n");
}
return 0;
}
```

Output:

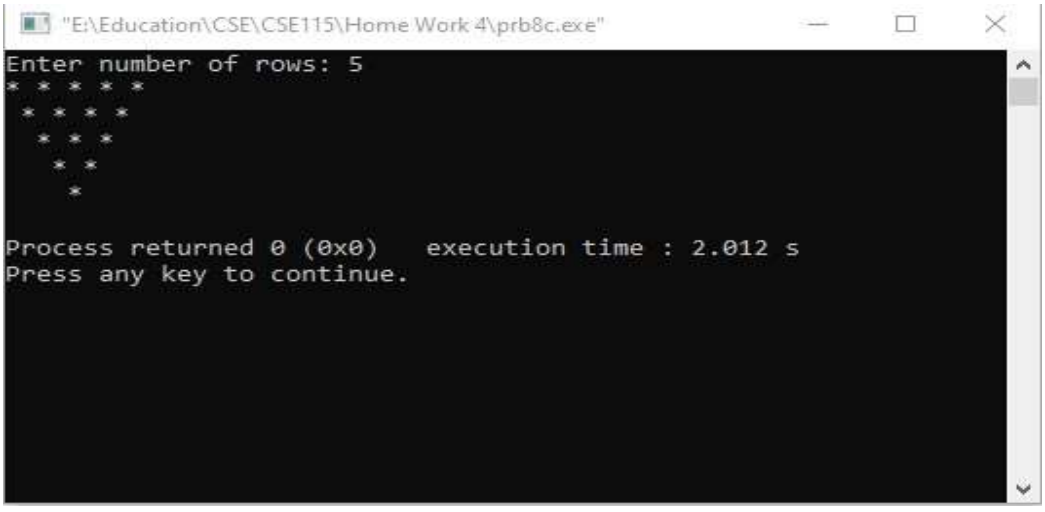


c)

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

```
int main()
{
int n, s, i, j;
printf("Enter number of rows: ");
scanf("%d",&n);
for(i = n; i >= 1; i--)
{
for(s = i; s < n; s++)
printf(" ");
for(j = 1; j <= i; j++)
printf("* ");
printf("\n");
}
return 0;
}
```

Output:

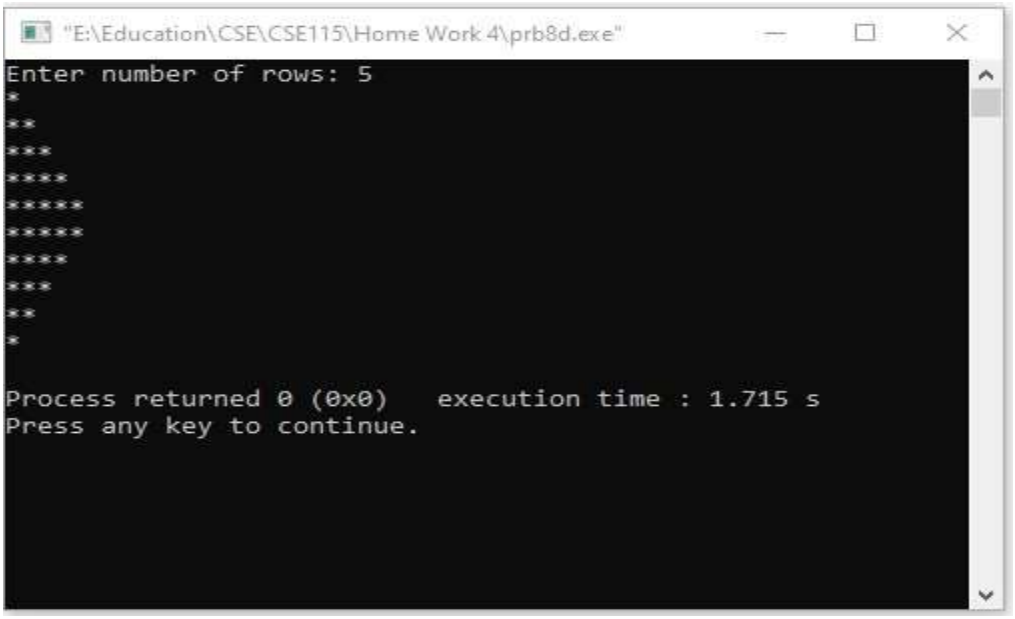


d)

```
#include<stdio.h>
#include<conio.h>
int main()
{
printf("Enter size of rows: ");
int n, i, j, m = 1, p;
scanf("%d",&n);
for(i = 0; i <= n; i++)
{
for(j = n; j > i; j--)
{
printf(" ");
}
printf("*");
if (i > 0)
{
for(p = 1; p <= m; p++)
{
printf(" ");
}
m += 2;
printf("*");
}
printf("\n");
```

```
}
m -= 4;
for(i = 0; i <= n-1; i++)
{
for(j = 0; j <= i; j++)
{
printf(" ");
}
printf("*");
for(p = 1; p <= m; p++)
{
printf(" ");
}
m -= 2;
if(i != n-1)
{
printf ("*");
}

printf("\n");
}
return 0;
}
```

Output:

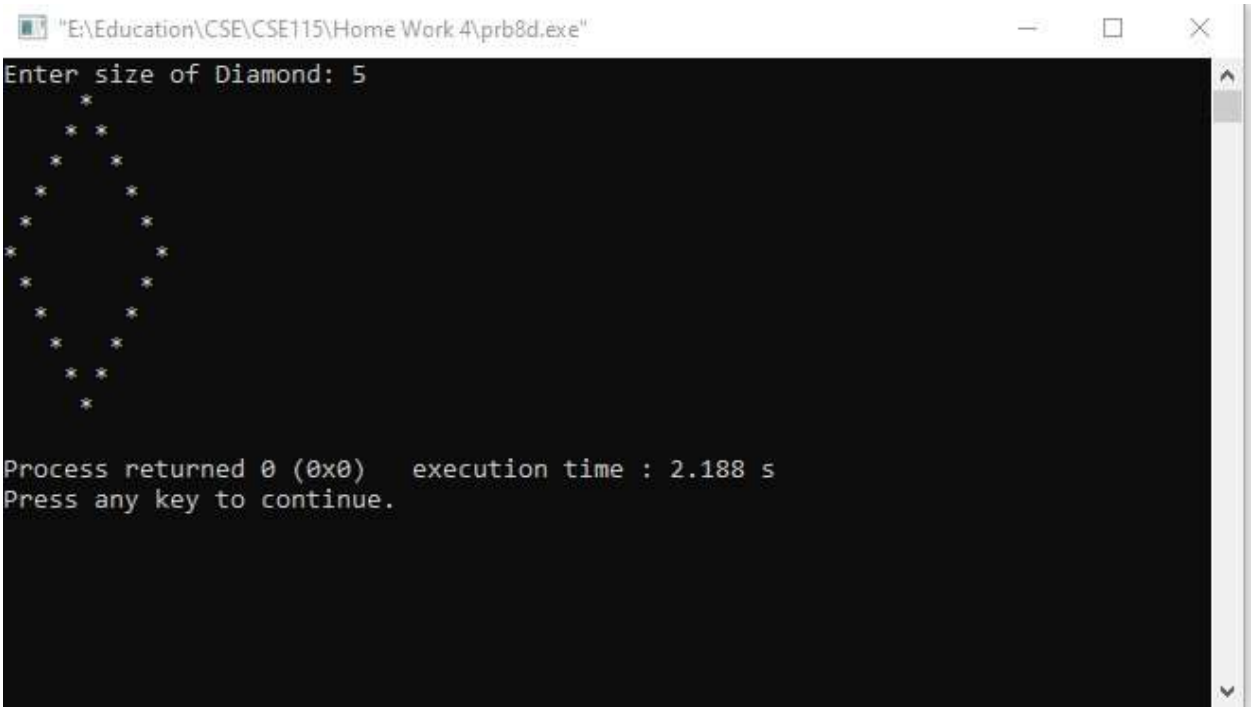


e)

```
#include<stdio.h>
int main()
{
  int i,j,n,k;
  printf("Enter size of Diamond: ");
  scanf("%d",&n);
  if(n%2!=0)
  {
     for(i=1;i<=n;i++)
     {
        for(k=i;k<=n;k++)
           printf(" ");
```

```
        for(j=1;j<=(2*i-1);j++)
        {
            if(j==1||j==2*i-1)
                printf("*");
            else
                printf(" ");
        }
        printf("\n");
    }

    for(i=n-1;i>=1;i--)
    {
        for(k=n;k>=i;k--)
            printf(" ");
        for(j=1;j<=(2*i-1);j++)
        {
            if(j==1||j==2*i-1)
                printf("*");
            else
                printf(" ");
        }
        printf("\n");
    }
  }
  else
    printf("Enter a odd number");
}
```

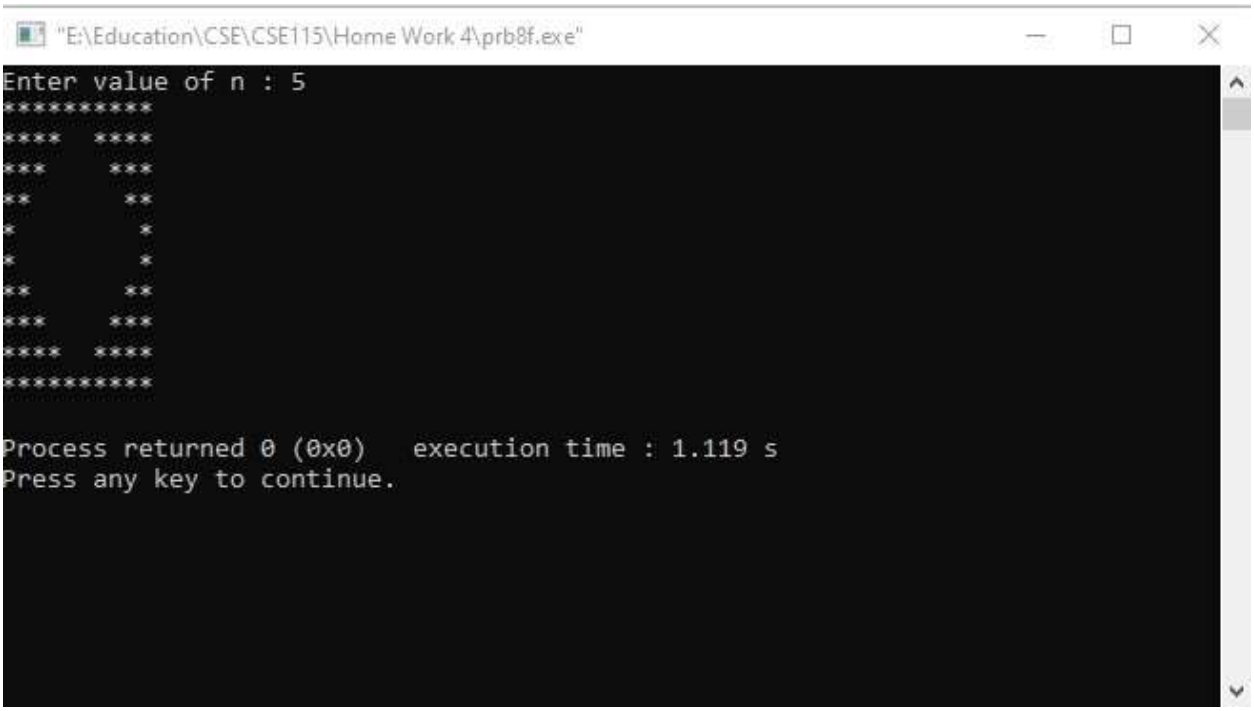
Output:



f)

```
#include<stdio.h>
int main()
{
  int i,j,n,k;
  printf("Enter value of n : ");
  scanf("%d",&n);
```

```
  if(n%2!=0)
  {
     for(i=1;i<=n;i++)
     {
        for(k=1;k<=n-i+1;k++)
           printf("*");
        for(j=1;j<2*i-1;j++)
           printf(" ");
        for(k=1;k<=n-i+1;k++)
           printf("*");
        printf("\n");
     }
     for(i=2;i<=n;i++)
     {
        for(k=1;k<=i;k++)
           printf("*");
        for(j=1;j<2*(n-i)+1;j++)
           printf(" ");
        for(k=1;k<=i;k++)
           printf("*");
        printf("\n");
     }
  }
  else
     printf("Enter a odd number");
}Output:
```


"E:\Education\CSE\CSE115\Home Work 4\prb8f.exe"
Enter value of n : 5
****
**** ****
***   ***
**   **
*   *
*   *
**   **
***   ***
**** ****
****
Process returned 0 (0x0)   execution time : 1.119 s
Press any key to continue.