Control Statement (for,do,while loop) Problem Sloving C Programme

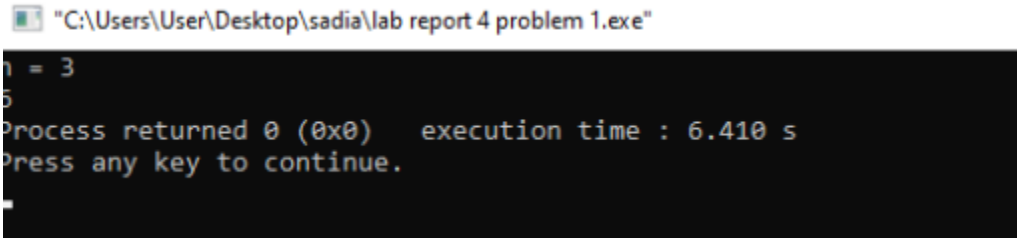
1.Write a program to compute the factorial of a number using while loop.

Input:

```
#include<stdio.h>
int main()
{
int i,fact=1,n;
printf("n = ");
scanf("%d",&n);

i =1;

while (i<=n)
{
fact=fact*i;

i++;

}
printf("%d",fact)
```

}

Output:



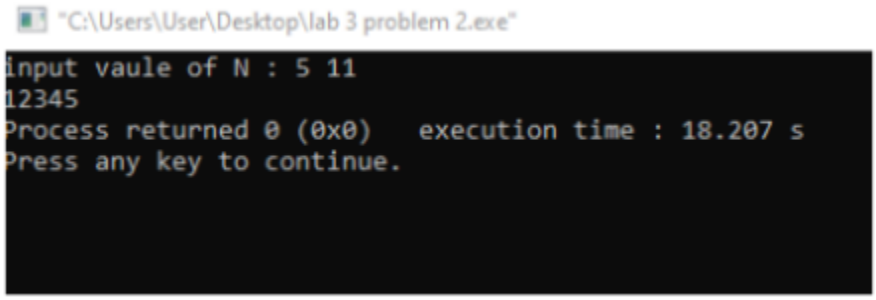
2. Write a C program that will print following series up to Nth terms.

Input:

```
#include<stdio.h>

int main()
{

int N,i;
printf("input vaule of N :
");
scanf("%d",&N);
for(i=1;i<=N;i++)
{
printf("%d",i);
}
```

}

Output:



3. Write a c program to print an odd series and find sum of the odd series.

Input:

```
#include<stdio.h>
int main()
{
int i,n, sum=0;

printf("input value of n:");

scanf("%d",&n);
for(i=1;i<=2*n-1;i=i+2)
{
printf("%d\n",i);
sum=sum+i;
}
```

```
printf("%d",sum);


}
```

Output:

4. Write a C program that will calculate the result for the first Nth terms of the

following series. [In that series sum, dot sign (.) means multiplication]

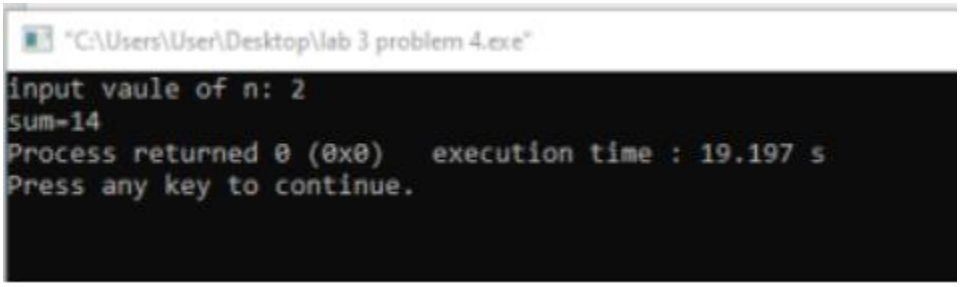
1 2 .2 + 2 2 .3 + 3 2 .4 + 4 2 .5 + …….

Input:

```
#include<stdio.h>

int main()

{

int i,t,sum=0,n;

printf("input vaule of n: ");

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

```
for(i=1;i<=n;i++)
{
t=i*i*(i+1);
sum=sum+t;
}

printf("sum=%d",sum);

}
```

Output:

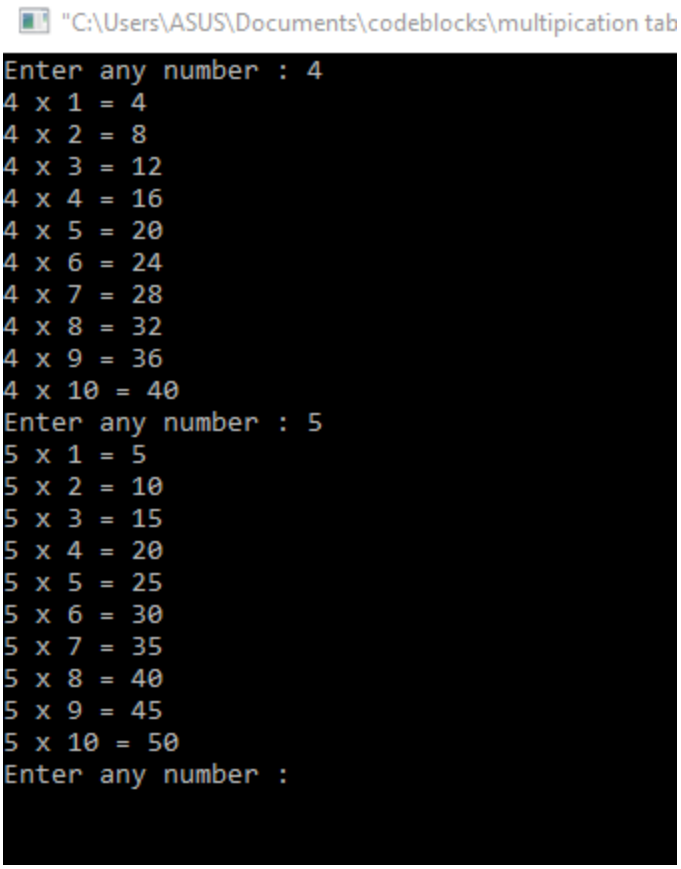


5.Write a C programme to show the multiple table.

Input:

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

   }

}
```

Output:



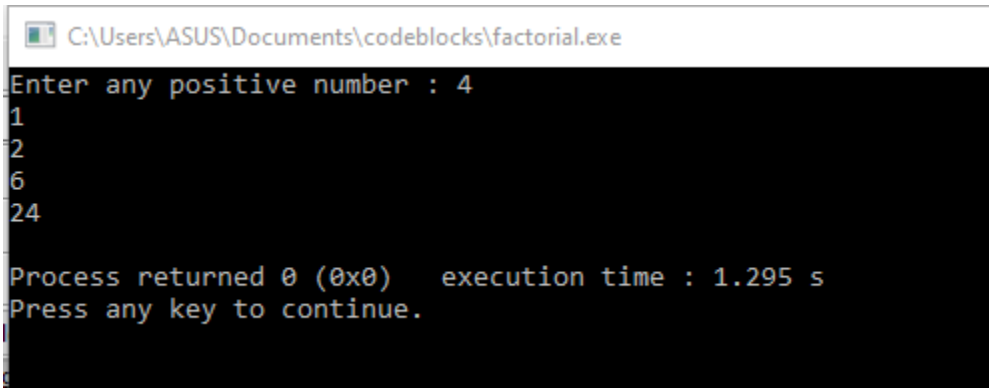
6.Write a N factorial of the number .

Input:

```
#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("%d\n",fact);

  }
```

Output:



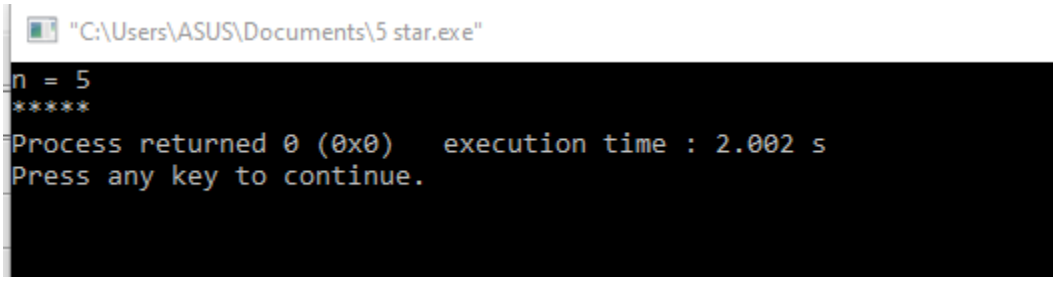
7. Write a C programe to show the five star .

Input:

```
#include<stdio.h>
int main()
{
   int i,n;
   printf("n = ");
   scanf("%d",&n);

   for(i=1;i<=n;i++)
```

```
    {
      printf("*",i);

    }

}
```

Output:



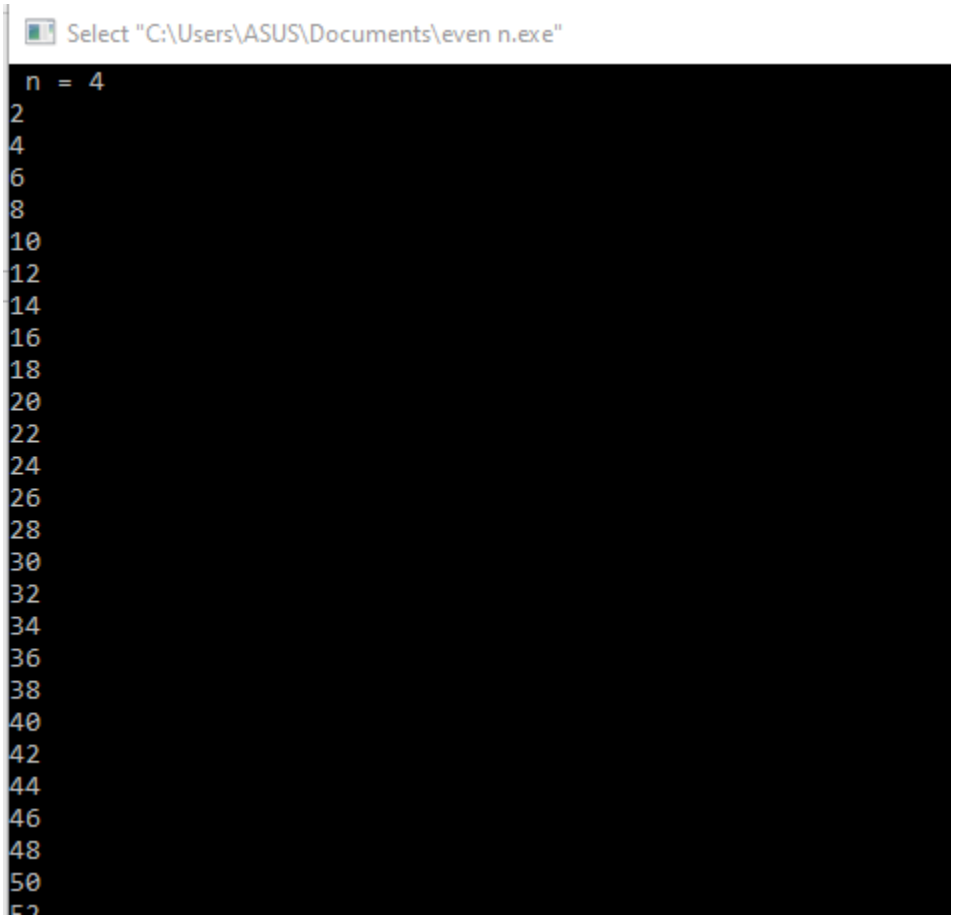
8 .Write a C programme 2 to 100 Even Number.

Input:

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

  int i,n;
  printf(" n = ");
  scanf("%d",&n);

  for (i=2;i<=100;i=i+2)
```

```
  {
     printf("%d\n",i);
  }



}
```

Output:



9.Write a C programme to calculate lcd & gcm

Input:

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

    n1=num1;
    n2=num2;

  while (n2!=0)
  {

    rem=n1%n2;
    n1=n2;
    n2=rem;

  }

   gcd=n1;
```

```
    lcm=(num1*num2)/gcd;


    printf("GCD = %d\n",gcd);
    printf("LCM = %d\n",lcm);


}
```

Output: