

## Assignment No-8

Q1) Write a program which accept number from user and display below pattern.

input - 4

output - \* \* \* \* # # # #

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

```
void display (int ino)
```

```
{ for (int i = 1; i <= ino; i++)
```

```
{ printf(" * \t");
```

```
}
```

```
for (int i = 1; i <= ino; i++)
```

```
{ printf(" # \t");
```

```
}
```

```
}
```

```
int main()
```

```
{ int iVal = 0;
```

```
printf("Enter number \n");
```

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

```
display (iVal);
```

```
return 0;
```

```
}
```

Q2) Accept amount in US dollar and convert it in INR  
consider 1\$ = 45 INR.

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

```
int DollarToINR (int ino)
```

```
{ int iResult = 0;
```

```
iResult = ino * 45;
```

```
return iResult;
```

```
}
```



```

int main()
{
    int ival = 0;
    printf("Enter number\n");
    scanf("%d", &ival);
    int rupees = DollarToINR(ival);
    printf("Value in Indian rupees is : %d", rupees);
    return 0;
}

```

Q3) write a program to find even factors of a number

```

#include <stdio.h>
int Evenfactor (int ino)
{
    if (ino < 0)
    {
        ino = -ino;
    }

    int Fact = 1;
    for (int i = ino; i >= 1; i--)
    {
        if (i % 2 == 0)
        {
            Fact = Fact * i;
        }
    }

    return Fact;
}

```

```

int main()
{
    int ival = 0;
    printf("Enter number\n");
    scanf("%d", &ival);
    int ifact = Evenfactor(ival);
    printf("Even factorial of number is : %d", ifact);
    return 0;
}

```



Q4 write a program to find odd factors of a number.

```
#include <stdio.h>
int OddFactor (int ino)
{
    if (ino < 0)
    {
        ino = -ino;
    }

    int Fact = 1;
    for (int i = ino; i >= 1; i--)
    {
        if (i % 2 != 0)
        {
            Fact = Fact * i;
        }
    }

    return oddfactor Fact;
}

int main()
{
    int iVal = 0;
    printf("Enter number\n");
    scanf("%d", &iVal);
    int iFact = oddFactor(iVal);
    printf("Odd Factorial of Number is : %d", iFact);
    return 0;
}
```

Q5 write a program to return the difference between even and odd factorial



```

#include <stdio.h>
int EvenOddFactdiff (int iNo)
{
    if (iNo <= 0)
    {
        iNo = -iNo;
    }

    int EvenFact = 1;
    int OddFact = 1;

    for (int i = iNo; i >= 1; i--)
    {
        if (i % 2 == 0)
        {
            iEvenFact = iEvenFact * i;
        } else
        {
            iOddFact = iOddFact * i;
        }
    }

    return iEvenFact - iOddFact;
}

int main()
{
    int iVal = 0;
    printf("Enter number\n");
    scanf("%d", &iVal);
    int iFact = EvenOddFactdiff(iVal);
    printf("difference between even and odd Factorial  
is : %d", iFact);
    return 0;
}

```