Logic Building Assignment : 4

Create separate visual Studio project for each problem statement separately.
Calculate Time Complexity of each program.

1. Write a program which accept number from user and display its multiplication of factors.

Input : 12
Output : 144 (1 * 2 * 3 * 4 * 6)

Input : 13
Output : 1 (1)

Input : 10
Output : 10 (1 * 2 * 5)

```
#include<stdio.h>

int MultFact(int iNo)
{

	// Logic

}

int main()
{
	int iValue = 0;
	int iRet = 0;

	printf("Enter number");
	scanf("%d",&iValue);

	iRet = MultFact(iValue);

	printf("%d",iRet);

	return 0;
}
```

2. Write a program which accept number from user and display its factors in decreasing order.

Input : 12
Output : 6 4 3 2 1

```
Input :     13
Output :    1

Input :     10
Output :    5     2     1

#include<stdio.h>

void FactRev(int iNo)
{

      // Logic

}

int main()
{
      int iValue = 0;

      printf("Enter number");
      scanf("%d",&iValue);

      FactRev(iValue);

      return 0;
}
```

3.Write a program which accept number from user and display all its non factors.

```
Input :     12
Output :    5     7     8     9     10    11

Input :     13
Output :    2     3     4     5     6     7     8     9     10    11    12

Input :     10
Output :    3     4     6     7     8     9

#include<stdio.h>

void NonFact(int iNo)
{

      // Logic

}
```

```
int main()
{
	int iValue = 0;

	printf("Enter number");
	scanf("%d",&iValue);

	NonFact(iValue);

	return 0;
}
```

4. Write a program which accept number from user and return summation of all its non factors.

```
Input :	12
Output :	50

Input :	10
Output :	37

#include<stdio.h>

int SumNonFact(int iNo)
{

	// Logic

}


int main()
{
	int iValue = 0;
	int iRet = 0;

	printf("Enter number");
	scanf("%d",&iValue);

	iRet  = SumNonFact(iValue);

	printf("%d",iRet);

	return 0;
}
```

5. Write a program which accept number from user and return difference between summation of all its factors and non factors.

Input : 12
Output : -34 (16 - 50)

Input : 10
Output : -29 (8 - 37)

```
#include<stdio.h>

int FactDiff(int iNo)
{

      // Logic

}

int main()
{
      int iValue = 0;
      int iRet = 0;

      printf("Enter number");
      scanf("%d",&iValue);

      iRet  = FactDiff(iValue);

      printf("%d",iRet);

      return 0;
}
```