

**Logic Building Assignment : 40**

**Complete below code snippets it contains only service provider function.**

**Write entry point function to call below helper functions separately.**

**1. Write a program which accept one number from user and count number of ON (1) bits in it without using % and / operator.**

Input : 11

Output : 3

```
int CountOne(UINT iNo)
{
    // Logic
}
```

**2. Write a program which accept two numbers from user and display position of common ON bits from that two numbers.**

Input : 10 15 (1010 1111)

Output : 2 4

```
void CommonBits(UINT iNo1, UINT iNo2)
{
    // Logic
}
```

**3. Write a program which accept one number from user and check whether 9th or 12th bit is on or off.**

Input : 257

Output : TRUE

```
BOOL ChkBit(UINT iNo)
{
    // Logic
}
```

**4. Write a program which accept one number, two positions from user and check whether bit at first or bit at second position is ON or OFF.**

Input : 10 3 7

Output : TRUE

```

BOOL ChkBit(UINT iNo, int iPos1, int iPos2)
{
    // Logic
}
    
```

**5. Write a program which accept one number from user and range of positions from user. Toggle all bits from that range.**

Input : 897      9      13  
Toggle all bits from position 9 to 13 of input number ie 879.

```

UINT ToggleBitRange(UINT iNo, int iStart, int iEnd)
{
    // Logic
}
    
```

