## Practice 05 – Decision Making + Bit Wise Operator

**Hint:** Use power function to create mask

**Task 01:** Input a character and tell position of bits, which are on. See sample run:

**Sample Run:**

```
Enter character: 'E'
Bit 1 is on
Bit 3 is on
Bit 7 is on

Enter character: 'e'
Bit 1 is on
Bit 3 is on
Bit 6 is on
Bit 7 is on
```

**Task 02:** Input two characters and tell how many bits are same:

**Sample Run:**

```
Enter first character: A
Enter second character: B
In A and B, 7 bit(s) are same

Enter first character: F
Enter second character: U
In F and U, 4 bit(s) are same
```

**Task 03:** Input two characters and check whether they are equal or not by counting bit difference. If bit difference is zero, characters are same, otherwise different

**Sample Run:**

```
Enter first character: T
Enter second character: t
'T' and 't' are different

Enter first character: f
Enter second character: f
'f' and 'f' are same
```

**Note:** single quotes are part of output

**Task 04:** Input a character and bit position from user and check, whether the bit is on or off

**Sample Run:**

```
Enter Character:'E'
Enter Bit Number:6
The bit number 6 is off in E

Enter Character:'E'
Enter Bit Number:1
The bit number 1 is on in E
```