

Practice 8 – 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, 1 bit(s) are same

Enter first character: T
Enter second character: U
In T and U, 3 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
```