

# Accenture Coding Round

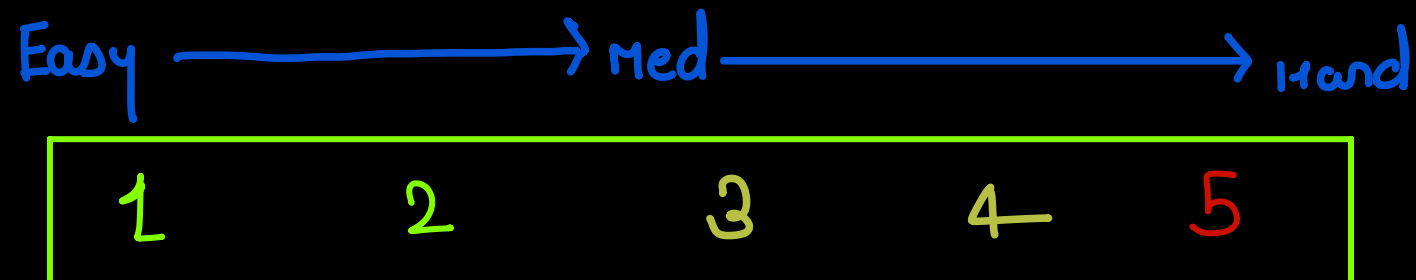
## 26 July 2024

— Shaurya Awasthi —

### Instructions :-

- Program should take input from standard input and print output to standard output.
  - Your code is judged by an automated system, do not write any additional welcome/greeting messages.
- "Save and Test" only checks for basic test cases, more rigorous cases will be used to judge your code while scoring.
- Additional score will be given for writing optimized code both in terms of memory and execution time

⇒ Level Rating



# Coding Question - 1

## Rearrangement Of Bits :

Alex Gives You a positive Number N and wants you to rearrange the bits of the number in its binary representation such that all set bits are in consecutive order. Your task is to find and return an integer value representing the minimum possible number that can be formed after re-arranging the bits of the number N.

I/p  $\rightarrow 10$  Binary  
o/p  $\rightarrow \textcircled{3}$  (1010)

I/p  $\rightarrow 2$  Binary  
o/p  $\rightarrow \boxed{01} \rightarrow \underline{1}$

- ① count set bits of N ✓
- ② make smallest Possible No. —

$$\underline{\underline{\text{Count} = 2}}$$

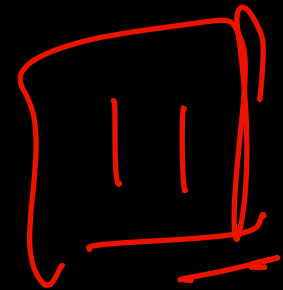
$$\text{count?} = 2$$

$$\text{return } (2^{\text{count}} - 1)$$

$$= (2^2 - 1)$$

Ip 10  
↓

$$= \underline{\underline{3}}$$



## Coding Question - 2

### Rock, Paper and Scissors:

Two players A and B are playing the game of Rock, Paper and scissors. Player A chooses a move represented by String M and the move can be one of the following: Rock, paper or scissors

where 1- Rock beats scissors

2- Scissor beats paper

3- Paper beats rock

Your task is to find and return a string value representing the winning move for B.

Ip → Rock		Ip → scissor		Ip → Paper
Op → Paper		Op → Rock		Op → scissor

```
string A;  
cin >> A;
```

```
if (A == "Rock") cout << "Paper";
```

```
else if (A == "Paper") cout << "Scissor";
```

```
else cout << "Rock";
```