

# Assginment:

## Question:1

Write a python code for converting integer values to Indian currency notations, without using the currency libraries:

Coding:-

```
import decimal
def Currency_convertor(n):
    d = decimal.Decimal(str(n))
    # 1: For converting the N number of exponents to 2 exponents
    if d.as_tuple().exponent < -2:
        s = str(n)
    else:
        s = '{0:.2f}'.format(n)
    i = len(s)-1
    # 2: Creating dummy variable
    new_num, val, k = "", 0, 0
    # 3: Converting the numbers
    # checking the value in reverse order
    while i >= 0:
        if val == 0:
            new_num = new_num + s[i]
            # 4: checking for decimal
            if s[i] == '.':
                val = 1
            # 5: Checking for the Thousand place
            elif val == 1:
                k = k + 1
                new_num = new_num + s[i]
                if k == 3 and i-1 >= 0:
                    new_num = new_num + ','
                    val = 2
                    k = 0
            # 6: Checking the lakhs and crores places
            else:
                k = k + 1
                new_num = new_num + s[i]
                if k == 2 and i-1 >= 0:
                    new_num = new_num + ','
                    val = 2
                    k = 0
        i = i - 1
    return new_num[::-1]
```

Output:-

```
In [20]: Currency_convertor(int(input()))
```

```
504678
```

```
Out[20]: '5,04,678.00'
```

Explanation:-

Created a function for converting a number into an Indian currency notation.

- I checked for decimal and converted it two digit.
- Then created a dummy variables to run the loop.
- Count the length of the number and run until decimal value starts.
- Checked for thousand Place.
- Checked for Lakhs and crores places.

## Question:2

You won't get caught if you hide behind someone."

Sang-Woo advises Gi-Hun to hide behind someone to avoid getting shot.

Gi-Hun follows Sang-Woo's advice and hides behind Ali, who saved his life earlier. Gi-Hun and Ali

both have the same height, K

. Many players saw this trick and also started hiding behind Ali.

Now, there are N

players standing between Gi-Hun and Ali in a straight line, with the ith player having height Hi

. Gi-Hun wants to know the minimum number of players who need to get shot so that Ali is visible in his line of sight.

Note:

- Line of sight is a straight line drawn between the topmost point of two objects. Ali is visible to Gi-Hun if nobody between them crosses this line.

- Even if there are some players who have the same height as that of Gi-Hun and Ali, Ali will be visible in Gi-Hun's line of sight.

- Gi-Hun and Ali have the same height.

Input Format

- The first line of input contains a single integer T, denoting the number of test cases. The description of T test cases follows.
- The first line of each test case contains two space-separated integers N and K, denoting the total number of players between Gi-Hun and Ali and the height of both of them respectively.
- The second line of each test case contains N space-separated integers, denoting the heights of the players between Gi-Hun and Ali.

Coding:-

```
#Bigger_hight_person function
```

```
def Bigger_hight_person():  
    T=int(input('Enter the Test cases '))  
    val=[]  
    for i in range(T):  
        #Taking inputs  
        N=[int(i) for i in input().split()]#for total number of peoples and hight of Gi-Hun and Ali  
        K=[int(i) for i in input().split()]#for hight of npeoples  
        v=0  
        # comparing the heights from other persons  
        for i in range(N[0]):  
            if K[i]>N[1]:  
                v=v+1  
        val.append(v)  
    for i in val:  
        print(i)
```

Output:-

```
In [4]: Bigger_hight_person()  
  
Enter the Test cases3  
4 10  
2 13 4 16  
5 8  
9 3 8 8 4  
4 6  
1 2 3 4  
2  
1  
0
```

Explanation:-

Created a Function to count the shot persons because of height difference.

- Taken the input for test case
- for loop to take the input and n number of test case.
- Taken the inputs for total number of peoples and hight of Gi-Hun and Ali
- Run the for loop count the shot peples