Day 7 Practice

In [12]:

```
s = "abB"
s.islower()
```

Out[12]:

```
False
```

In [13]:

```
s.isupper()
ls = list(s)
ls
```

Out[13]:

```
['a', 'b', 'B']
```

In [20]:

```
# Toggle String Problem Alternate solution
s = input()
def toggleStr(s):
    # Converts the string into a list of char
    s = list(s)
    t = []
    for c in s:
        if c.islower():
            t.append(c.upper())
        else:
            t.append(c.lower())
    return "".join(t)
toggleStr(s)
```

```
avcdDeFS
```

Out[20]:

```
'AVCDdEfs'
```

In [24]:

```
n = int(input())
ls=[]
for i in range(1,n+1):
    ls.append(int(input()))
ls[0]
```

```
2
33
4
```

Out[24]:

```
33
```

In [29]:

```
def checkSeat(a):
    if(a == 1 or a%6 == 0 or a/6 == 1):
        return "WS"
    elif(a == 3 or a == 4 or (a/3 == 0 and a%4 == 1) or (a%3 == 1 and a%4 == 2) or (a%3 ==
        return "AS"
    else:
        return "MS"
n = int(input())
ls = []
for i in range(1,n+1):
    ls.append(int(input()))
for j in range(0,len(ls)):
    print(checkSeat(ls[j]))
```

```
2
19
45
MS
MS
```

In [34]:

```
12/6 == 2
```

Out[34]:

```
True
```

In [1]:

```
# Prime Numbers

def checkPrime(i):
    flag = 0
    if(i == 1 or i==2):
        return True
    else:
        for j in range(2,i):
            if(i%j == 0):
                flag = 1
    if flag == 1:
        return False
    else:
        return True

def generatePrimes(n):
    for j in range(2,n+1):
        if(checkPrime(j)):
            print(j,end=" ")

n = int(input())
generatePrimes(n)
```

```
6
2 3 5
```

In [2]:

```
# Palindrome

def checkPal(s):
    temp = s
    if temp == s[-1::-1]:
        print("YES")
    else:
        print("NO")
s = input()
checkPal(s)
```

```
amma
YES
```

In [4]:

```
# Count Divisiors

def check(l,r,k):
    count = 0
    for l in range(l,r+1):
        if l%k == 0:
            count+=1
    return count
ls = input()
ls = ls.split()
l = int(ls[0])
r = int(ls[1])
k = int(ls[2])

a = check(l,r,k)
print(a)
```

```
1 2 2
1
```

In [6]:

```
# Duration Problem
def countMin(sh,sm,eh,em):
    total = 0
    if (sh+1)==eh or (eh-1)==sh:
        total = total + (60-sm)+em
    elif(sh==eh):
        total = em-sm
    else:
        total = (60-sm)+em
        i = sh+1
        j = eh
        for i in range(i,j):
            total += 60

    return total

def duration(sh,sm,eh,em):
    tot_min = countMin(sh,sm,eh,em)
    hours = tot_min//60
    mint = tot_min%60
    print(hours,end=" ")
    print(mint)

n = int(input())
lst=[]
for i in range(1,n+1):
    s = input()
    lst.append(s)
def cal(lst):
    for i in range(0,len(lst)):
        temp = lst[i].split()
        sh = int(temp[0])
        sm = int(temp[1])
        eh = int(temp[2])
        em = int(temp[3])
        duration(sh,sm,eh,em)
cal(lst)
```

```
1
2 30 5 50
3 20
```

In [ ]:

```

```