

In [12]:

```

1  # Cost of Ballons
2  t=int(input())
3  for s in range(0,t):
4      g,p=map(int,input().split())
5      n=int(input())
6      x1=[]
7      x2=[]
8      for t in range(0,n):
9          i,j=map(int,input().split())
10         x1.append(i)
11         x2.append(j)
12     if g>p:
13         if sum(x1)>sum(x2):
14             print(g*sum(x2)+p*sum(x1))
15         else:
16             print(g*sum(x1)+p*sum(x2))
17     else:
18
19         if sum(x1)>sum(x2):
20             print(p*sum(x2)+g*sum(x1))
21         else:
22             print(p*sum(x1)+g*sum(x2))
23

```

```

2
9 6
10
1 1
1 1
0 1
0 0
0 1
0 0
0 1
0 1
1 1
0 0
69
1 9
10
0 1
0 0
0 0
0 1

```

Seating Arrangement

In [3]:

```
1 t=int(input())
2 for i in range(t):
3     n=int(input())
4     if n%12==1 :
5         print((n+11), 'WS')
6     elif n%12==2:
7         print((n+9), 'MS')
8     elif n%12==3:
9         print((n+7), 'AS')
10    elif n%12==4:
11        print((n+5), 'AS')
12    elif n%12==5:
13        print((n+3), 'MS')
14    elif n%12==6:
15        print((n+1), 'WS')
16    elif n%12==7:
17        print((n-1), 'WS')
18    elif n%12==8:
19        print((n-3), 'MS')
20    elif n%12==9:
21        print((n-5), 'AS')
22    elif n%12==10:
23        print((n-7), 'AS')
24    elif n%12==11:
25        print((n-9), 'MS')
26    elif n%12==0:
27        print((n-11), 'WS')
28
29
30
31
32
33
```

```
2
18
19 WS
40
45 AS
```

```
In [10]: 1 #Function to add contact to contacts text file
2
3
4 from Packages import validator
5
6 def addcontact(name,phone,email):
7     # store data as name,phone,email in the contacts file
8     filename='DataFiles/contacts.txt'
9     if not checkcontacts(name):
10         if pnv(phone) and ev(email):
11
12             if phonenumber(phone) and verifiedmail(email):
13
14
15                 with open(filename,'a') as f:
16
17
18
19                     line=name+', '+ str(phone) +', '+ email +'\n'
20                     f.write(line)
21                     print(name,'added to contacts')
22             else:
23                 print('Invalid phone number and email ')
24             return
25         else:
26             print(name,'already exists')
27         return
28 #addcontact('name1','8790700295','name1@gmail.com')
29
30
31
32 #Function to check if contact already exists
33 import re
34 def checkcontacts(name):
35     filename='DataFiles/contacts.txt'
36     with open(filename,'r') as f:
37         filedata=f.read()
38         pattern=name+', '
39     return re.search(pattern,filedata)
40 #if checkcontacts("name1,"):
41     #print(False)
42 addcontact('name1',8790700295,'name1@gmai.com')
```

name1 already exists

```
In [11]: 1 filename='DataFiles/contacts.txt'
2 def csvlist(filename):
3     li=[]
4     with open(filename,'r') as f:
5         for line in f:
6             li.append(line.split(','))
7     return li
8 #csvlist(filename)
9 def listtofile(li):
10     s = ''
11     for i in li:
12         s.join(i)
13     return s
14 csvlist(filename)
15 #listtofile(li)
16
```

```
Out[11]: [['name1', '9876543210', 'name1_234@gmail.com\n'],
['name2',
'9492363502',
'name2_345@gmail.comname1',
'8790700295',
'name1@gmail.com\n'],
['name1', '8790700295', 'name1@gmail.com\n'],
['name1', '8790700295', 'name1@gmail.com\n'],
['name1', '8790700295', 'name1@gmail.com\n'],
['name1', '8790700295', 'name1@gmail.com\n'],
['name1', '8790700295', 'name1@gmail.com\n'],
['name1', '8790700295', 'name1@gmail.com\n'],
['name1', '8790700295', 'name1@gmail.com\n'],
['name1', '8790700295', 'name1@gmail.com\n'],
['name1', '8790700295', 'name1@gmail.com\n'],
['name1', '8790700295', 'name1@gmail.com\n'],
['name1', '8790700295', 'name1@gmail.com\n'],
['name1', '8790700295', 'name1@gmail.com\n']]
```

```
In [15]: 1  #Given an array of ints, return True if 6 appears as either the first or last
2
3
4  #first_last6([1, 2, 6]) → True
5  #first_last6([6, 1, 2, 3]) → True
6  #first_last6([13, 6, 1, 2, 3]) → False
7
8
9
10
11
12
13
14  def first_last6(nums):
15      if(nums[0] == 6 or nums[-1] == 6):
16
17
18          return True
19      else:
20
21
22          return False
23
24  first_last6([6,1,2,3])
```

Out[15]: True

In []: 1

In []: 1

In []: 1