1.Harold and his homework:

```
Compiler: Python 3.6
nguage: PYTHON3 -
         input1 : int
         input2 : int[]
         input3 : int[]
         Expected return type : int
         # Read only region end
         # Write code here
         mm=list(map(int,.split()))
         m=input1
          #d=list(map(int,input2.split()))
          dic={}
          t=input1
          for i in range(0,t):
             if d[i] not in dic.keys():
                 dic[d[i]]=m[i]
                 dic[d[i]]=max(m[i],dic[d[i]])
          return sum(dic.values())
```

```
Question # 4

How to attempt?
Question:

Harold and his homework

Harold and Dan are friends and study in the same class. One day, completing Harold's homework.

The deal is that, for every piece of homework belonging to Harold will give Dan some money. The catch is that every piece of headline associated with it and has to be completed within that dead it takes 1 unit amount of time to complete a homework. You have to the maximum money have to the property of the same in part 2.
```

NOTE: Here, m=input2 d=input3

2.Halindrome:

(change it as per the question)

def ispal(s):

if s == rev:
 return True

rev = ''.join(reversed(s))

```
return False
                                                                                 def ishal(s):
                                                                                         if len(s) < 2:
                                                                                                return False
                                                                                         if len(s) == 2 and not ispal(s):
                                                                                                return False
  Halindrome
                                                                                         if len(s)>=2 and ispal(s):
                                                                                               return True
 Given a string S. Let us divide S into two equal parts S1 and S2. S is called a halindrome if
 at least any one of the following conditions satisfy:

1. S is a palindrome and length of S >= 2
                                                                                                if(len(s)>=4):
    2. S1 is a halindrome.
                                                                                                       s1 = s[0:len(s)//2]
    3. 52 is a halindrome
                                                                                                       s2 = s[(len(s)//2)+1:] if len(s) %2 != 0 else s[len(s)//2:]
In the case of an odd length string, the middle element is not present in both S1 and S2 if index of middle element is m, then, S1 = S \{0, m-1\} and S2 = S \{m+1, |S|-1\}.
                                                                                                       if ishal(s1) or ishal(s2):
                                                                                                               return True
Input 1: Number of strings

1<=Input ==100.
Input 2: An array of size input 1 containing strings.
2 <= length of each string <=100.
                                                                                 n = int(input())
                                                                                 a = list(input().split(","))
                                                                                 for i in range(n):
Output Specification
                                                                                         if ishal(a[i]):
For each test case, return the number of strings which are halindromes.
                                                                                 print(c)
```

Abraham:

```
n=int(input())
c=0;
while n/2>=1:
c+=1
n=n/2
if(n==2):
a=(2*(2**c))-1
else:
a=(2**c)-1
print(a)
//Abraham in python 9:30 am
```

Planting Trees:

```
n=int(input())
k=int(input())

trees=[2]

for i in range(n):
    trees_planted=list(range(0,(trees.pop(0)+1)%k))
    trees+=trees_planted
#print(trees)
if len(trees)==0:
    print(1)
else:
    print(len(trees))
```

Frequency co:

```
Language: PYTHON3 →
                        Compiler: Python 3.6
            w menn outh region can
12
             # Write code here
13
             dic={}
             for i in input1:
             dic[i]=dic.get(i,0)+1
            1=[]
            for i in dic.items():
             1.append(i)
             1.sort()
             #print(1)
21
             newl=[]
             for i in 1:
              newl.append(i[0])
               newl.append(str(i[1]))
25
            news=''.join(newl)
26
             return news
27
28
30
31
 Code Results Your Testcase
```

Monica and flavours some errors:

```
expected return type : int
13
               # Read only region end
14
               1=[]
               input3=list(input3)
15
               for i in range(0,input2):
16
17
                   if input3[i] not in 1:
                       print(input3[i])
18
                        l.append(input3[i])
19
               #print(1)
20
 21
               return len(1)
 22
 23
 24
```

Social Network

```
1
  2
     #SOCIAL NETWORK
  3
  4 print("Enter Range:",end=" ")
     n=int(input())
  5
  6
     a=[]
  7
  8
     a=list(range(n+1))
     for i in range(2,int(n**(1/2))+1):
  9
 10
          s=0
          if(i!=-1):
 11
 12
              k=0
              f=1
 13
              while(f):
 14
                   s=i*(i+k)
 15
                  if(s<n+1):
 16
 17
                       a[s] = -1
                       k=k+1
 18
 19
                  else:
                       f=0
 20
 21
     c=0
 22
     for i in a[2:]:
         if i!=-1:
 23
 24
              c=c+1
 25
Shell ×
Python 3.7.6 (bundled)
>>> %Run 'Social Network.py'
 Enter Range: 10
 Total: 3
```

LCS with Vowels

```
str1 = input()
str2 = input ()
```

```
c1 = c2 = 0
for ch in str1:
    if ch in vowels:
        c1 += 1
for ch in str2:
    if ch in vowels:
        c2 += 1
print(min(c1,c2))
```

vowels = 'aeiou'

Longest palindromic subsequence

```
| Particulation of the Control of Communitation of the Control of Communitation of the Control of Communitation of the Control of Co
```

Bob and Numbers

```
n = int(input())
a = list(map(int,input().split()))
c = 0
for i in range(n-1):
  for j in range(i+1:n):
    s1 = sum(list(map(int,bin(i)[2:].split())))
    s2 = sum(list(map(int,bin(j)[2:].split())))
    if s1 == s2:
        c += 1
print(c
```

apple orchard solution

```
Initialize a max = 0
iterate a loop on sorted array.
suppose sorted arr[] ={48,80,82}
now iterate
for (int i = 0 ; i < n ; i++)
int temp = arr[i] * (n-i+1);
if (temp > max)
max = temp;
}
} // end of for loop
Print(max)
New----
n = int(input())
I = list(map(int,input().split()))
res = min(I)*n
print(res)
```

Sort the array.

Evaluate a given infix expression

Use eval() in python

```
Python >>>
>>> eval("2 ** 8")
256
>>> eval("1024 + 1024")
2048
>>> eval("sum([8, 16, 32])")
56
>>> x = 100
>>> eval("x * 2")
200
```

Maximum subarray

```
def maxSubArray(self, nums: List[int]) -> int:
    max_sub_sum = 0
    prev_max = 0
    for num in nums:
        prev_max = max(prev_max + num, num)
        max_sub_sum = max(prev_max, max_sub_sum)

#if max is 0 and 0 not in list it means that there is no num in subarray, so we choose max num from list if max_sub_sum is 0 and 0 not in nums:
        max_sub_sum = max(nums)

return max_sub_sum
```

MOVING APPLES

```
Language:
                           Compiler: Python 3.6
            PYTHON3 -
7
             input1 : int
             input2 : int[]
9
10
             Expected return type : int
11
12
             # Read only region end
13
             # Write code here
14
             avg=sum(input2)//input1
15
             5=0
15
             for i in input2:
17
                 if i>avg:
18
                     5=5+(1-avg)
19
              return s
28
              pass
 21
```

NEXT GENERATOR NUMBER

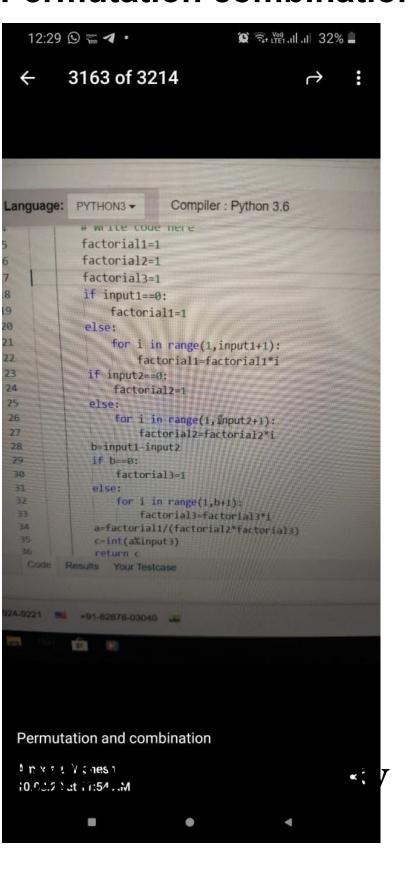
```
class Solution {
    public int[] nextGreaterElements(int[] nums) {
        int[] output=new int[nums.length];
        int n=nums.length;
        Arrays.fill(output,-1);
        Stack<Integer> stk=new Stack();

        for(int i=0;i<n*2;i++){
            while(!stk.isEmpty() && nums[stk.peek()]<nums[i%n]){
                 output[stk.pop()]=nums[i%n];
            }
            if(i<n) stk.push(i);
        }
        return output;
    }
}</pre>
```

Selective arrangements

```
1
                             2
                                   3
                                                1 of 4 >
Language:
             PYTHON3 →
                             Compiler: Python 3.6
    # Read only region start
     class UserMainCode(object):
3
4
          @classmethod
          def arrangements(cls, input1):
6
              input1 : int
8
9
               Expected return type : int
10
               # Read only region end
11
               # Write code here
12
               arr=[0 for i in range(input1+1)]
14
               arr[0]=1
               arr[1]=0
               arr[2]=1
               for i in range(3,input1+1):
                   arr[i]=(i-1)*(arr[i-1]+arr[i-2])
               return (arr[input1])
             +91-82878-030-0
550-924-9221
```

Permutation combination



Abraham:

```
n=int(input())
a= {i:i for i in range(n)}
#print(a)
while(len(a)>1):
  I=[]
  for i in range(0,len(a),2):
     I.append(i)
  #print('l=',I)
  for i in I:
     a.pop(i)
    #print(i)
  #print(a)
  counter=0
  d1={}
  for i in a:
     key=i
     val=a[i]
    #a.pop(key)
     d1[counter]=val
     counter+=1
    #print(a)
  a=dict(d1)
  #print(a)
  #input()
print(a[0])
```

Think a number:

