1806554 Assignment 2 Python

```
In [1]:
               1
                  s = input()
               2
                  cnt = 0
               3
                  for i in s:
               4
                      cnt = cnt + 1
               5
                  print(cnt)
              ganesh
In [2]:
               1 s = input()
               2
                  print(s[::-1])
              ganesh
              hsenag
In [3]:
                  s = input()
               1
                  rev = s[::-1]
               3
                  if rev == s:
                      print("Palindrome")
               4
               5
                  else:
                       print("Not palindrome")
               6
              ganesh
              Not palindrome
```

```
In [10]:
                1
                  # with library
                2
                  x = input()
                3
                  y = input()
                  ans = x.find(y)
                4
                  if(ans == -1):
                5
                       print("doesnt contain")
               6
               7
                  else:
               8
                       print(f'present at index {ans}')
               9
                  # without library
              10
              11
                  def index(s, sub):
              12
              13
                       start = 0
                       end = 0
              14
                       while start < len(s):
              15
                           if s[start+end] != sub[end]:
              16
              17
                                start += 1
                                end = 0
              18
                                continue
              19
                           end += 1
              20
                           if end == len(sub):
              21
              22
                                return start
              23
                       return -1
              24
                  ans = index(x,y)
                  print(f'present at index {ans}')
              25
               ganesh
               ane
               present at index 1
               present at index 1
```

```
In [7]:
               1
                 s = input()
              2
                 cnt, cntn, cnts, cntv = 0,0,0,0
               3
                 for i in range(0,len(s)):
                      x = ord(s[i])
               4
                      if s[i] in "aeiou" :
               5
              6
                          cntv = cntv + 1
              7
                      elif x>37 and x<48:
              8
                          cnts = cnts + 1
              9
                      elif x>58 and x<65:
                          cnts = cnts + 1
             10
                      elif x>48 and x<57:
             11
                          cntn = cntn + 1
             12
             13
                      else:
                          cnt = cnt + 1
             14
                 print(f'vowels = {cntv} , cons = {cnt} , num = {cntn} , special c = {cnt
             15
              ganesh(),
              vowels = 2 , cons = 4 , num = 0 , special c = 3
```

```
In [4]:
                 # with Lib
              1
              2
                 s = input()
              3
                 × = ""
              4
              5
                 for i in s:
              6
                     if i.islower() == True:
              7
                         i = i.upper()
              8
                          x = x + i
              9
                     else:
                          i = i.lower()
             10
                          x = x + i
             11
                 print(x)
             12
             13
             14
                 # without lib
             15
                 x = ""
             16
             17
                 for i in s:
             18
                     m = ord(i)
                     if (m>=97 and m<=122) == True:
             19
             20
                         m = m - 32
                          x = x + chr(m)
             21
             22
                     else:
             23
                         m = m + 32
                          x = x + chr(m)
             24
             25
                 print(x)
              gAnesH
              GaNESh
              GaNESh
```

```
In [18]:
               1
                  lst = []
                  n = int(input())
               2
               3
                  for i in range(0,n):
                      x = input()
               4
                      lst.append(str(x))
               5
                  #lst = [str(i) for i in lst]
               6
               7
                  lst.sort()
               8
                  lst = [int(i) if i.isdigit() else i for i in lst ]
                  print(lst)
               9
               3
               [2, 3, 4, 'd', 's']
In [18]:
                  s = input()
               1
               2
                  x = input()
                  cnt = 0
               3
               4
                  for i in s:
               5
                      if i == x:
               6
                          cnt = cnt + 1
                  print(cnt)
               ganesh
               g
               1
```

```
In [60]:
                1
                   #with Lib
                2
                   s = input()
                3
                   s = s.replace("is","was")
                4
                   print(s)
                5
                6
                   #without lib
                7
                8
                   def replstr(orig, old, new):
                9
                       i = 0
                       ans = ''
               10
                       temp = ''
               11
                       for c in orig:
               12
               13
                            if c == old[i]:
                                i += 1
               14
               15
                                temp += c
                            else:
               16
                                i = 0
               17
               18
                                if temp:
               19
                                     ans += temp
                                    temp = ''
               20
               21
                                ans += c
               22
                            if len(temp) == len(old):
               23
                                ans += new
                                temp = ''
               24
               25
                                i = 0
               26
                       else:
                            if temp:
               27
               28
                                ans += temp
               29
                       return ans
                   replstr("India is Great Country", "is", "was")
               30
               31
               India is a Great Country
               India was a Great Country
               'India was Great Country'
```

```
In [49]:
                1
                   #with Lib
                2
                   s = input()
                3
                   s = s.replace("was","is")
                4
                   print(s)
                5
                6
                   #without lib
                7
                8
                   def replstr(orig, old, new):
                9
                       i = 0
                       ans = ''
               10
                       temp = ''
               11
                       for c in orig:
               12
               13
                            if c == old[i]:
                                i += 1
               14
               15
                                temp += c
                            else:
               16
                                i = 0
               17
               18
                                if temp:
               19
                                     ans += temp
                                    temp = ''
               20
               21
                                ans += c
               22
                            if len(temp) == len(old):
               23
                                ans += new
                                temp = ''
               24
               25
                                i = 0
               26
                       else:
                            if temp:
               27
               28
                                ans += temp
               29
                       return ans
                   replstr("India was a Great Country", "was", "is")
               30
               India was a Great Country
               India is a Great Country
               'India is a Great Country'
```

```
In [8]:
                1
                   s = []
                  n = int(input())
                2
                3
                  for i in range(0,n):
                       x = input()
                4
                       s.append(x)
                5
                6
                  for i in range(0,len(s)):
                7
                       if i%2==0:
                            print(s[i],end = " ")
                8
               4
               India
               Stands
               For
               Unity
               India For
In [54]:
                  s1 = input()
                1
                2
                  s2 = input()
                  ans = ""
                3
                4
                   x = 0
                5
                  v = 0
                   for i in range(0,len(s1+s2)-1):
                6
                7
                       if i%2==0:
                8
                            ans = ans + s1[x]
                9
                            x = x + 1
               10
                       else:
               11
                            ans = ans + s2[y]
               12
                           y = y + 1
                  if len(s1+s2)\%2==0:
               13
                       ans = ans + s2[-1]
               14
               15
                   else:
                       ans = ans + s1[-1]
               16
                   print(ans)
               17
               INDIA
               patna
               IpNaDtInAa
```

```
In [32]:
                 1
                    def subset(s,n):
                 2
                         for Len in range(1, n + 1):
                 3
                             for i in range(n - Len + 1):
                                  j = i + Len - 1
                 4
                                  for k in range(i,j + 1):
                 5
                                       print(s[k],end="")
                 6
                                  print()
                 7
                 8
                    s = input()
                 9
                    subset(s,len(s))
                10
                ganesh
                ga
                an
                ne
                es
                sh
                gan
                ane
                nes
                esh
                gane
                anes
                nesh
                ganes
                anesh
                ganesh
```

File Management

```
In [60]:

1     my_file = open("myfile.txt", "w")
2     my_file.write("abc\n")
3     my_file.write("123")
4     my_file = open("myfile.txt")
5     content = my_file.read()
6     my_file.close()
```

```
In [61]:
                 print(content)
               1
               abc
               123
In [ ]:
               1
In [22]:
                  # my_file = open("test.txt", "w")
               1
                  # my_file.write("abc\n")
               2
                  # my_file.write("123")
               3
               4
               5
                  with open("myfile.txt") as f:
                      with open("out.txt", "w") as f1:
               6
                           for line in f:
               7
                               f1.write(line)
               8
                  # my_file = open("out.txt")
               9
                  # content = my_file.read()
              10
                  # my_file.close()
              11
                  with open("out.txt") as f:
              12
                      for line in f:
              13
                           print(line,end = "")
              14
               abc
               123
```

```
In [126]:
                1
                   import csv
                   with open("info_large.txt") as f:
                2
                       with open("info names.txt", "r") as f1:
                3
                4
                            try:
                                for rows in f1:
                5
                6
                                      print(rows)
                                    x = csv.reader(f, delimiter=" ")
                7
                8
                                    y = csv.reader(f1,delimiter=" ")
                                    xx = list(x)
                9
                                    yy = list(y)
               10
                                    x = str(xx[1][0])
               11
                                    y = str(yy[0])
               12
               13
                                    print(x)
                                    if(x==y):
               14
                                         print(x)
               15
                                      print(xx[1][0])
               16
               17
                                      print(yy[0])
               18
                                       row = csv.reader(f1, delimiter=" ")
               19
                                      print(f.search(rows))
               20
                                       if next(row) in rows:
               21
                                           print("its present")
               22
                            except IndexError:
               23
               24
                                pass
               25
               Moti
 In [ ]:
                1
 In [ ]:
                1
```