

▼ Task2 : Strings

Q1) <https://www.hackerrank.com/challenges/swap-case?isFullScreen=true>

```
def swap_case(s):
    return s.swapcase()

s = input("Enter a string: ")
result = swap_case(s)
print(result)

Enter a string: AppLE
aPPle
```

Q2) <https://www.hackerrank.com/challenges/python-string-split-and-join?isFullScreen=true>

```
def split_and_join(line):
    str_arr = line.split(" ")
    return "-".join(str_arr)

line = input("Enter a string: ")
result = split_and_join(line)
print(result)

Enter a string: Knowledge is power
Knowledge-is-power
```

Q3) <https://www.hackerrank.com/challenges/whats-your-name?isFullScreen=true>

```
def print_full_name(first_name, last_name):

    print("Hello " + first_name + " " + last_name + "! You just delved into python.")

first_name = input("firstname: ")
last_name = input("lastname: ")
print_full_name(first_name, last_name)

firstname: Jawaharlal
lastname: Nehru
Hello Jawaharlal Nehru! You just delved into python.
```

Q4) <https://www.hackerrank.com/challenges/python-mutations?isFullScreen=true>

```
def mutate_string(string, position, character):

    str_list = list(string)
    str_list[position] = character
    return ''.join(str_list)

s = input("String: ")
i, c = input().split()
s_new = mutate_string(s, int(i), c)
print(s_new)

String: Knowledge
2 5
Kn5wledge
```

Q5) <https://www.hackerrank.com/challenges/find-a-string?isFullScreen=true>

```
def count_substring(string, sub_string):
    count = 0
    for i in range(0, len(string) - len(sub_string) + 1):
        if string[i] == sub_string[0]:
            flag = 1
            for j in range(0, len(sub_string)):
                if string[i+j] != sub_string[j]:
                    flag = 0
                    break
            if 1 == flag:
                count += 1
```

```

    return count

string = input().strip()
sub_string = input().strip()

```

Q6) <https://www.hackerrank.com/challenges/string-validators?isFullScreen=true>

```

s = input("String :")
print(any(n.isalnum() for n in s))
print(any(n.isalpha() for n in s))
print(any(n.isdigit() for n in s))
print(any(n.islower() for n in s))
print(any(n.isupper() for n in s))

```

```

String :Power
True
True
False
True
True

```

Q7) <https://www.hackerrank.com/challenges/text-alignment?isFullScreen=true>

```

thickness = int(input())
c = 'H'

# Top Cone
for i in range(thickness):
    print((c*i).rjust(thickness-1)+c+(c*i).ljust(thickness-1))

# Top Pillars
for i in range(thickness+1):
    print((c*thickness).center(thickness*2)+(c*thickness).center(thickness*6))

# Middle Belt
for i in range((thickness+1)//2):
    print((c*thickness*5).center(thickness*6))

# Bottom Pillars
for i in range(thickness+1):
    print((c*thickness).center(thickness*2)+(c*thickness).center(thickness*6))

# Bottom Cone
for i in range(thickness):
    print(((c*(thickness-i-1)).rjust(thickness)+c+(c*(thickness-i-1)).ljust(thickness)).rjust(thickness*6))

```

Q8) <https://www.hackerrank.com/challenges/text-wrap?isFullScreen=true>

```

import textwrap

def wrap(string, max_width):
    return textwrap.fill(string, max_width)

string, max_width = input(), int(input())
result = wrap(string, max_width)
print(result)

```

Q9) <https://www.hackerrank.com/challenges/designer-door-mat?isFullScreen=true>

```

symbol = '.|.'
n, m = input().split()
n = int(n)
m = int(m)
center = int(n/ 2)+1
length = 1
for i in range(1, n+1):
    if i < center:
        print((symbol*length).center(m, '-'))
        length += 2
    elif i > center:
        print((symbol*length).center(m, '-'))
        length -= 2
    else:
        print("WELCOME".center(m, '-'))
        length -= 2

```

```

7 9
---|.---
.|..|..|.
.|..|..|..|.
-WELCOME-
.|..|..|..|.
.|..|..|.
---|.---

```

Q10) <https://www.hackerrank.com/challenges/python-string-formatting?isFullScreen=true>

```

def print_formatted(number):
    width = len("{0:b}".format(number))
    for i in range(1, n + 1):
        print("{0:{width}d} {0:{width}o} {0:{width}X} {0:{width}b}".format(i, width=width))

n = int(input("N: "))
print_formatted(n)

```

```

N: 5
1  1  1  1
2  2  2 10
3  3  3 11
4  4  4 100
5  5  5 101

```

Q11) <https://www.hackerrank.com/challenges/alphabet-rangoli?isFullScreen=true>

```

import string
def print_rangoli(size):
    alpha = string.ascii_lowercase
    l = []
    for i in range(0, size):
        s = "-".join(alpha[i:size])
        l.append((s[::-1] + s[1:]).center(4*n-3, '-'))
    print('\n'.join(l[::-1] + l[1:]))

n = int(input())
print_rangoli(n)

```

Q12) <https://www.hackerrank.com/challenges/capitalize?isFullScreen=true>

```

#!/bin/python3

import math
import os
import random
import re
import sys

def solve(s):
    for x in s[:].split():
        s = s.replace(x, x.capitalize())
    return s

if __name__ == '__main__':
    fptr = open(os.environ['OUTPUT_PATH'], 'w')

    s = input()

    result = solve(s)

    fptr.write(result + '\n')

    fptr.close()

```

Q13) <https://www.hackerrank.com/challenges/the-minion-game?isFullScreen=true>

```

def minion_game(string):
    vowels = 'AEIOU'
    keyscore = 0
    stuscore = 0
    for i in range(0, len(string)):
        if string[i] in vowels:
            keyscore += len(string) - i

```

```
        else:
            stuscore += len(string) - i

    if keyscore > stuscore:
        print('Kevin {}'.format(keyscore))
    elif stuscore > keyscore:
        print( 'Stuart {}'.format(stuscore) )
    else:
        print('Draw')

s=.input()
minion_game(s)
```

Q14) <https://www.hackerrank.com/challenges/merge-the-tools?isFullScreen=true>

```
def merge_the_tools(string, k):
    for i in range(0, len(string), k):
        unique = []
        str_list = list(string[i:i+k])
        for c in str_list:
            if c not in unique:
                unique.append(c)
        print("".join(unique))

string, k = input(), int(input())
merge_the_tools(string, k)
```

0s completed at 12:21

