

Celebal Assignment 2 > capitalize.py > ...

```
1 def solve(s):
2     separate_words = s.split(' ')
3     capitalized_words = [word.capitalize() for word in separate_words]
4     final_string = ' '.join(capitalized_words)
5     return final_string
6
7 s = input("Enter a string: ")
8 print(solve(s))
9
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

PS C:\Users\grahu\Desktop\My Codes> cd "c:\Users\grahu\Desktop\My Codes\Celebal Assignment 2"

PS C:\Users\grahu\Desktop\My Codes\Celebal Assignment 2> python -u "c:\Users\grahu\Desktop\My Codes\Celebal Assignment 2\capitalize.py"

Enter a string: hello, i am an intern at celebal!

Hello, I Am An Intern At Celebal!

PS C:\Users\grahu\Desktop\My Codes\Celebal Assignment 2> |

Celebal Assignment 2 > introduction-to-set.py > ...

```
1 def average(array):
2     s = set(array)
3     total = sum(s)
4     length = len(s)
5     return float(total / length)
6
7 arr = list(map(int, input("Enter space-separated integers: ").split()))
8 print(average(arr))
9
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

 Code

PS C:\Users\grahu\Desktop\My Codes> cd "c:\Users\grahu\Desktop\My Codes\Celebal Assignment 2"

PS C:\Users\grahu\Desktop\My Codes\Celebal Assignment 2> python -u "c:\Users\grahu\Desktop\My Codes\Celebal Assignment 2\introduction-to-set.py"

Enter space-separated integers: 161 182 161 154 176 170 167 171 170 174

169.375

PS C:\Users\grahu\Desktop\My Codes\Celebal Assignment 2> █

text-wrap.py X

Celebal Assignment 2 > text-wrap.py > ...

```
1  import textwrap
2
3  def wrap(string, max_width):
4      result = ''
5      for i in range(0, len(string), max_width):
6          line = string[i:i+max_width]
7          if i + max_width >= len(string):
8              result += line
9          else:
10             result += line + '\n'
11     return result
12
13     string = input("Enter the string: ")
14     max_width = int(input("Enter max width: "))
15
16     print(wrap(string, max_width))
17
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
PS C:\Users\grahu\Desktop\My Codes> cd "c:\Users\grahu\Desktop\My Codes\Celebal Assignment 2"
PS C:\Users\grahu\Desktop\My Codes\Celebal Assignment 2> python -u "c:\Users\grahu\Desktop\My Codes\Celebal Assignment 2\text-wrap.py"
Enter the string: ABCDEFGHIJKLMNOPQRSTUVWXYZ
Enter max width: 4
ABCD
EFGH
IJKL
IMNO
QRST
UVWX
YZ
PS C:\Users\grahu\Desktop\My Codes\Celebal Assignment 2> |
```

alphabet-rangoli.py X

Celebal Assignment 2 > alphabet-rangoli.py > print_rangoli

```
1 def print_rangoli(size):
2     alphabets = ['a', 'b', 'c', 'd', 'e', 'f', 'g', 'h', 'i', 'j', 'k', 'l', 'm',
3                 'n', 'o', 'p', 'q', 'r', 's', 't', 'u', 'v', 'w', 'x', 'y', 'z']
4
5     width = 4 * size - 3
6     pattern = []
7
8     for i in range(size):
9         left = alphabets[size-1:size-1-i:-1]
10        right = alphabets[size-1-i:size]
11        row = left + right
12        line = '-'.join(row)
13        pattern.append(line.center(width, '-'))
14
15    for i in range(size-2, -1, -1):
16        pattern.append(pattern[i])
17
18    print('\n'.join(pattern))
19
20
21    n = int(input("Enter the size of rangoli you want- "))
22    print_rangoli(n)
23
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

 Code

```
PS C:\Users\grahu\Desktop\My Codes> cd "c:\Users\grahu\Desktop\My Codes\Celebal Assignment 2"
PS C:\Users\grahu\Desktop\My Codes\Celebal Assignment 2> python -u "c:\Users\grahu\Desktop\My Codes\Celebal Assignment 2\alphabet-rangoli.py"
Enter the size of rangoli you want- 5
-----e-----
-----e-d-e-----
----e-d-c-d-e----
--e-d-c-b-c-d-e--
e-d-c-b-a-b-c-d-e
--e-d-c-b-c-d-e--
----e-d-c-d-e----
-----e-d-e-----
-----e-----
PS C:\Users\grahu\Desktop\My Codes\Celebal Assignment 2> 
```

merge-the-tools.py X


Celebal Assignment 2 > merge-the-tools.py > ...


```
1 def merge_the_tools(string, k):
2     n = len(string)
3     for i in range(0, n, k):
4         substring = string[i:i+k]
5         seen = set()
6         result = ''
7         for ch in substring:
8             if ch not in seen:
9                 seen.add(ch)
10                result += ch
11        print(result)
12
13 input_string = input("Enter the string: ")
14 segment_length = int(input("Enter the segment length (k): "))
15
16 merge_the_tools(input_string, segment_length)
17
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

Code

```
PS C:\Users\grahu\Desktop\My Codes> cd "c:\Users\grahu\Desktop\My Codes\Celebal Assignment 2"
PS C:\Users\grahu\Desktop\My Codes\Celebal Assignment 2> python -u "c:\Users\grahu\Desktop\My Codes\Celebal Assignment 2\merge-the-tools.py"
Enter the string: AABCAAADA
Enter the segment length (k): 3
AB
CA
AD
PS C:\Users\grahu\Desktop\My Codes\Celebal Assignment 2> |
```

 collections.Counter().py X

Celebal Assignment 2 >  collections.Counter().py > ...

```
1 total_shoes = int(input("Enter the total number of shoes- "))
2 shoe_sizes_input = input("Enter the list of shoe sizes- ").split()
3 shoe_inventory = []
4
5 for size in shoe_sizes_input:
6     shoe_inventory.append(int(size))
7
8 number_of_customers = int(input("Enter the number of customers- "))
9 total_earnings = 0
10
11 for _ in range(number_of_customers):
12     size_requested, price_offered = map(int, input("Give the shoe size and the price- ").split())
13     if size_requested in shoe_inventory:
14         total_earnings += price_offered
15         shoe_inventory.remove(size_requested)
16
17 print(total_earnings)
18
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

 Code +

```
PS C:\Users\grahu\Desktop\My Codes> cd "c:\Users\grahu\Desktop\My Codes\Celebal Assignment 2"
PS C:\Users\grahu\Desktop\My Codes\Celebal Assignment 2> python -u "c:\Users\grahu\Desktop\My Codes\Celebal Assignment 2\collections.Counter().py"
Enter the total number of shoes- 10
Enter the list of shoe sizes- 2 3 4 5 6 8 7 6 5 18
Enter the number of customers- 6
Give the shoe size and the price- 6 55
Give the shoe size and the price- 6 45
Give the shoe size and the price- 6 55
Give the shoe size and the price- 4 40
Give the shoe size and the price- 18 60
Give the shoe size and the price- 10 50
200
PS C:\Users\grahu\Desktop\My Codes\Celebal Assignment 2> |
```

error-and-exceptions.py X

Celebal Assignment 2 > error-and-exceptions.py > ...

```
1  t = int(input("Enter the number of test cases- "))
2
3  for _ in range(t):
4      print("Enter the value of A and B- ")
5      try:
6          a, b = input().split()
7          result = int(a) // int(b)
8          print(result)
9      except (ZeroDivisionError, ValueError) as e:
10         print("Error Code:", e)
11
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS Code

```
PS C:\Users\grahu\Desktop\My Codes> cd "c:\Users\grahu\Desktop\My Codes\Celebal Assignment 2"
PS C:\Users\grahu\Desktop\My Codes\Celebal Assignment 2> python -u "c:\Users\grahu\Desktop\My Codes\Celebal Assignment 2\error-and-exceptions.py"
Enter the number of test cases- 3
Enter the value of A and B-
1 0
Error Code: integer division or modulo by zero
Enter the value of A and B-
2 $
Error Code: invalid literal for int() with base 10: '$'
Enter the value of A and B-
3 1
3
PS C:\Users\grahu\Desktop\My Codes\Celebal Assignment 2> |
```

regex.py X

Celebal Assignment 2 > regex.py > ...

```
1 def is_valid_regex(pattern):
2     repeat_operators = {'*', '+', '?'}
3     for i in range(1, len(pattern)):
4         if pattern[i] in repeat_operators and pattern[i - 1] in repeat_operators and pattern[i - 1] != '\\':
5             return False
6         if pattern[i] in repeat_operators and pattern[i - 1] == '\\':
7             continue
8     return True
9
10 n = int(input("Enter the number of test cases- "))
11 for _ in range(n):
12     pattern = input("Enter the pattern- ")
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
PS C:\Users\grahu\Desktop\My Codes> cd "c:\Users\grahu\Desktop\My Codes\Celebal Assignment 2"
PS C:\Users\grahu\Desktop\My Codes\Celebal Assignment 2> python -u "c:\Users\grahu\Desktop\My Codes\Celebal Assignment 2\regex.py"
Enter the number of test cases- 2
Enter the pattern- .*\\+
True
Enter the pattern- .*+
False
PS C:\Users\grahu\Desktop\My Codes\Celebal Assignment 2> |
```


set-discard-remove-pop.py X

Celebal Assignment 2 > set-discard-remove-pop.py > ...

```
1  number_of_elements = int(input("Input number of elements- "))
2  initial_set = set(map(int, input("Enter the numbers of the set- ").split()))
3  number_of_commands = int(input("Number of commands- "))
4
5  for _ in range(number_of_commands):
6      command_parts = input().split()
7      command = command_parts[0]
8
9      if command == 'pop':
10         initial_set.pop()
11     elif command == 'remove':
12         initial_set.remove(int(command_parts[1]))
13     elif command == 'discard':
14         initial_set.discard(int(command_parts[1]))
15
16     print(sum(initial_set))
17
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

PS C:\Users\grahu\Desktop\My Codes> cd "c:\Users\grahu\Desktop\My Codes\Celebal Assignment 2"

PS C:\Users\grahu\Desktop\My Codes\Celebal Assignment 2> python -u "c:\Users\grahu\Desktop\My Codes\Celebal Assignment 2\set-di

Input number of elements- 9

Enter the numbers of the set- 1 2 3 4 5 6 7 8 9

Number of commands- 10

pop

remove 9

discard 9

discard 8

remove 7

pop

discard 6

remove 5

pop

discard 5

4

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