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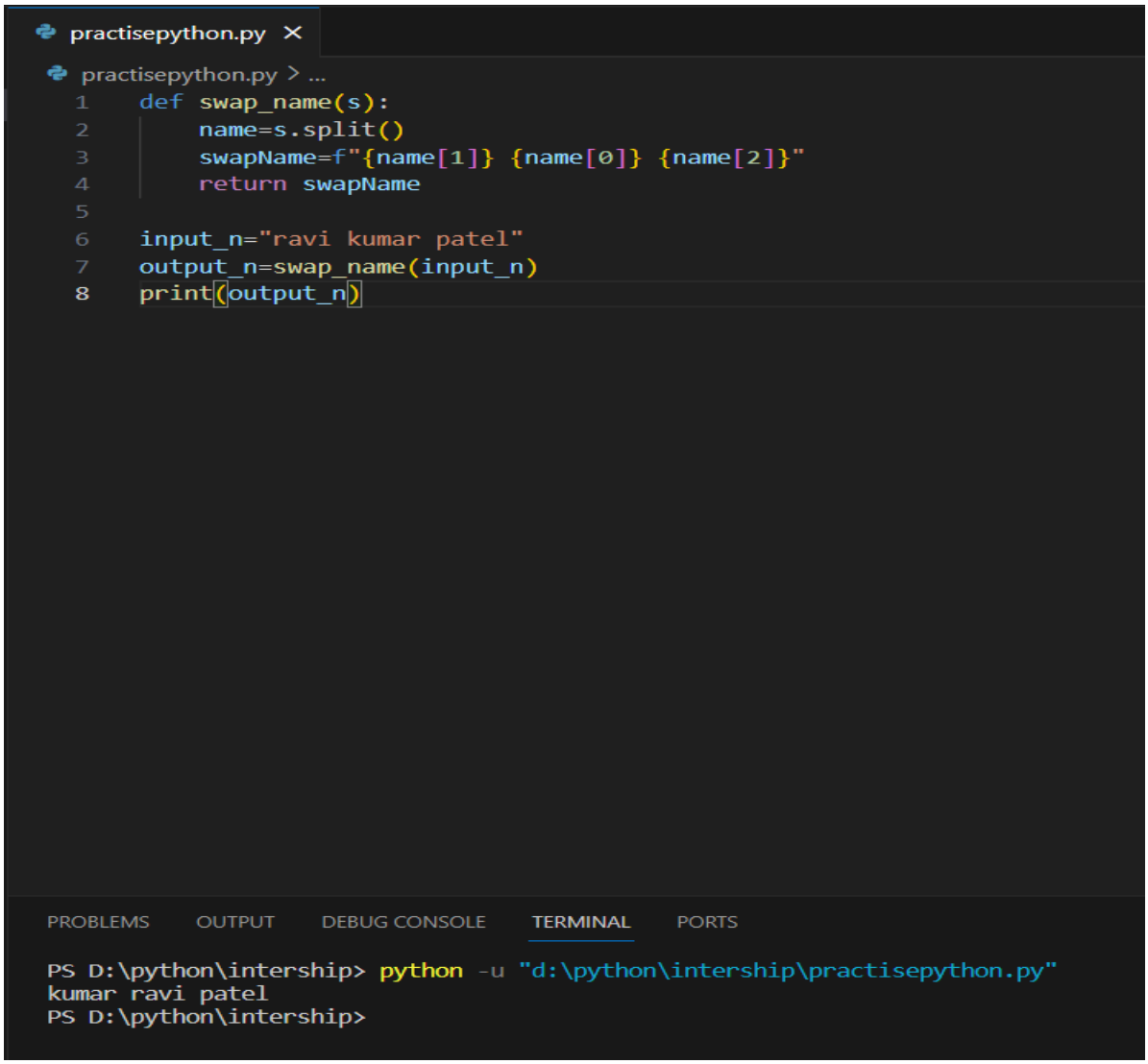
Assignment -1 (python practise questions)

Q1:- Write a python program to swap below string . Input = Ravi Kumar Patel, output = Kumar Ravi patel

Code:-



Q-2:- Write a python program to find maximum number from the list without using sorting list = [87,43 ,76,1,99,23,8]

Code:-

```
l=[87,43 ,76,1,99,23,8]
print(max(l))
```

```
> python -u "
99
```

3. Write python to find the occurance of character in string s1= google output = g=2,o=2...

```
from collections import Counter

def word_count(s):
    occurrences=Counter(s)
    for char, count in occurrences.items():
        print(f"{char}={count}")

s="google"
word_count(s)
```

```
> pytho
g=2
o=2
l=1
e=1
```

4. Use list comprehension to solve below problem . Find all number from 1-1000 are divided by 7

```
23  ########q4#########
24  divisi_by_7=[num for num in range (1,1000) if num%7==0]
25  print(divisi_by_7)
```

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS
[7, 14, 21, 28, 35, 42, 49, 56, 63, 70, 77, 84, 91, 98, 105, 112, 119, 126, 133, 140, 147, 154, 161, 168, 175, 182, 189, 196, 203, 210, 217,
224, 231, 238, 245, 252, 259, 266, 273, 280, 287, 294, 301, 308, 315, 322, 329, 336, 343, 350, 357, 364, 371, 378, 385, 392, 399, 406, 413, 4
20, 427, 434, 441, 448, 455, 462, 469, 476, 483, 490, 497, 504, 511, 518, 525, 532, 539, 546, 553, 560, 567, 574, 581, 588, 595, 602, 609, 61
6, 623, 630, 637, 644, 651, 658, 665, 672, 679, 686, 693, 700, 707, 714, 721, 728, 735, 742, 749, 756, 763, 770, 777, 784, 791, 798, 805, 812
, 819, 826, 833, 840, 847, 854, 861, 868, 875, 882, 889, 896, 903, 910, 917, 924, 931, 938, 945, 952, 959, 966, 973, 980, 987, 994]
PS D:\python\intership>
```

5. Produce a list containing word even if number is even and odd if number is odd . Input = [75,8,94,2,23,29,100], output = [odd, even ,even ,...]

```
27
28  numbers = [75, 8, 94, 2, 23, 29, 100]
29  new_l=['even' if num%2==0 else 'odd' for num in numbers]
30  print(new_l)
```

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

                    > python -u "d:\python\intership\practisepython.py"
['odd', 'even', 'even', 'even', 'odd', 'odd', 'even']
PS D:\python\intership>
```

6. Write a program to extract numbers from the string .input = 'hello 1 hi 9 . How are 10' output =[1,9,10]

```
34  import re
35
36  def extract_num(s):
37      numbers=re.findall(r'\d+',s)
38      return [int(num) for num in numbers]
39
40  print(extract_num("hello 1 hi 9 . How are 10"))
```

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

                    > python -u "d:\python\intership\practisep
[1, 9, 10]
PS D:\python\intership>
```

7. Write a program to find give string of email is in correct format or not. Input=xyz@gmail.com output = correct

```python
import re
def validate_email(email):
    pattern = r'^[a-zA-Z0-9_.+-]+@[a-zA-Z0-9-]+\.[a-zA-Z0-9-.]+$'
    if re.match(pattern, email):
        return "correct"
    else:
        return "incorrect"
email = "xyz@gmail.com"
print(validate_email(email))
```

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

> python -u "d:\python\intership\practisepython.py"
correct
```

8. Write program to remove all white space in from the string

```python
def remove_white_space(s):
    return s.replace(" ", "")

input_string = "hello world 123"
output = remove_white_space(input_string)
print(output)
```

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

> python -u "d:\python\intershi
helloworld123
```

9. Write a program to find sum of 1to50 numbers using list comprehension

```
60  sum_numbers = sum([num for num in range(1, 51)])
61  print(sum_numbers)
62
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
> python -u "d:\python\intership\prac
1275
```

10. Write a program to check string is alpha numeric or not

```
def is_alphanumeric(s):
    return s.isalnum()
input_string = "hello123"
output = is_alphanumeric(input_string)
print(output)
```

```
> python -u
True
```