

Name-Sushant V Joshi

Roll No.- A-326

ERP= 1132200617

PYTHON PRACTICAL EXAM FEB 2022

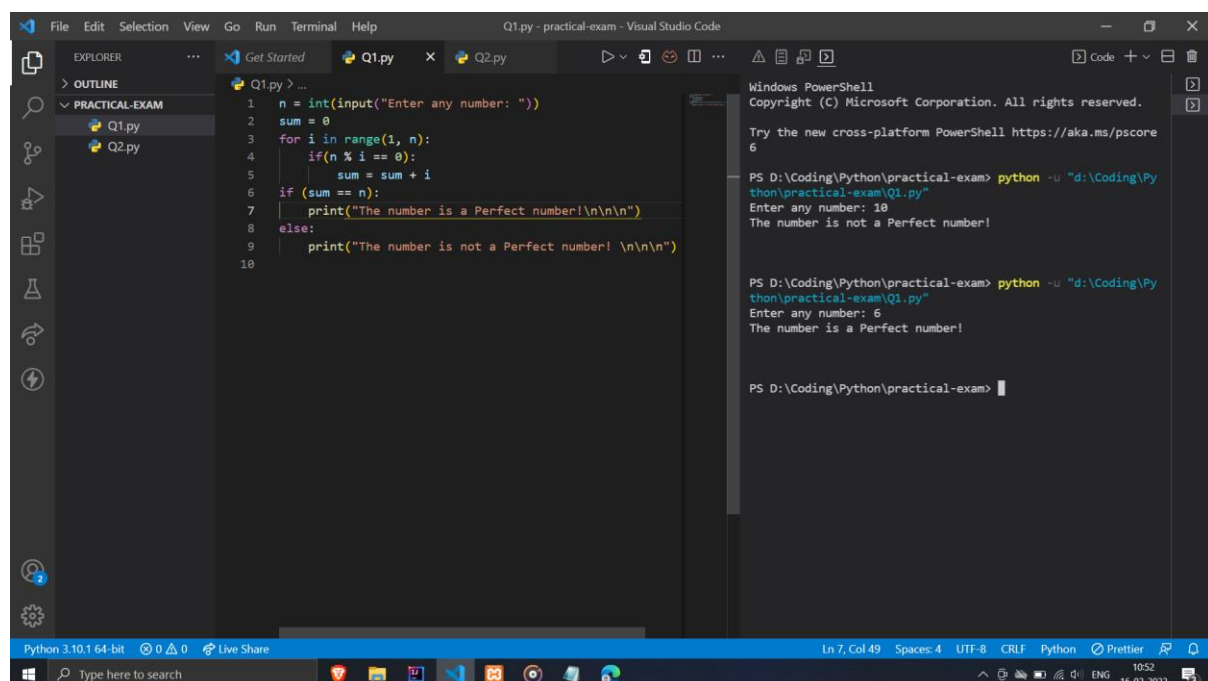
Slip no. 26

Q.1 Python program to find given number is Perfect number or not

Solution==

```
n = int(input("Enter any number: "))
sum = 0
for i in range(1, n):
    if(n % i == 0):
        sum = sum + i
if (sum == n):
    print("The number is a Perfect number!\n\n\n")
else:
    print("The number is not a Perfect number! \n\n\n")
```

output==



The screenshot shows the Visual Studio Code editor with a file named 'Q1.py' open. The code in the editor is the same as the solution provided. The terminal on the right shows the execution of the program. The first run uses the input '10' and outputs 'The number is not a Perfect number!'. The second run uses the input '6' and outputs 'The number is a Perfect number!'. The status bar at the bottom indicates the Python version is 3.10.1 64-bit and the file is encoded in UTF-8.

```
File Edit Selection View Go Run Terminal Help
Q1.py - practical-exam - Visual Studio Code

EXPLORER
> OUTLINE
PRACTICAL-EXAM
  Q1.py
  Q2.py

Q1.py
1 n = int(input("Enter any number: "))
2 sum = 0
3 for i in range(1, n):
4     if(n % i == 0):
5         sum = sum + i
6 if (sum == n):
7     print("The number is a Perfect number!\n\n\n")
8 else:
9     print("The number is not a Perfect number! \n\n\n")
10

Windows PowerShell
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Try the new cross-platform PowerShell https://aka.ms/pscore6

PS D:\Coding\Python\practical-exam> python -u "d:\Coding\Python\practical-exam\Q1.py"
Enter any number: 10
The number is not a Perfect number!

PS D:\Coding\Python\practical-exam> python -u "d:\Coding\Python\practical-exam\Q1.py"
Enter any number: 6
The number is a Perfect number!

PS D:\Coding\Python\practical-exam>
```

Q.2 Predefined String functions in python.

Solution==

```
s=input("Enter your text->")

print("Predefined String functions->\n\n")

# String function to capitalize 1st letter
a=s.capitalize()
print("String with 1st letter capitalized: "+a)

# String function to lower case all characters
b=s.casefold()
print("String with lowercase: "+b)

# String function to find index of a string in Given String
c=s.index("s")
print("Index of s is:",c)

#String function to adjust given string in center
d=s.center(20)
print(d)

#string function to find length of string
print("Length of given string is:",len(s))
```

output==

The image shows a Visual Studio Code window titled "Q2.py - practical-exam - Visual Studio Code". The Explorer sidebar on the left shows a project named "PRACTICAL-EXAM" containing two files: "Q1.py" and "Q2.py". The main editor displays the content of "Q2.py", which is a Python script demonstrating various string functions. The script includes comments and code for capitalizing the first letter, converting to lowercase, finding the index of a character, centering a string, and finding the length of a string. The output of the script is shown in the PowerShell terminal on the right, which displays the results of each function call for the input string "sUshANT Joshi".

```
1 s=input("Enter your text->")
2
3 print("Predefined String functions->\n\n")
4
5
6 # String function to capitalize 1st letter
7 a=s.capitalize()
8 print("String with 1st letter capitalized: "+a)
9
10
11 # String function to lower case all characters
12 b=s.casefold()
13 print("String with lowercase: "+b)
14
15
16 # String function to find index of a string in Given Str
17 c=s.index("s")
18 print("Index of s is:",c)
19
20 #String function to adjust given string in center
21 d=s.center(20)
22 print(d)
23
24
25 #string function to find length of string
26 print("Length of given string is:",len(s))
27
```

Windows PowerShell
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Try the new cross-platform PowerShell <https://aka.ms/pscore6>
PS D:\Coding\Python\practical-exam> python -u "d:\Coding\Python\practical-exam\Q2.py"
Enter your text->sUshANT Joshi
Predefined String functions->

String with 1st letter capitalized: Sushant joshi
String with lowercase: sushant joshi
Index of s is: 0
sUshANT Joshi
Length of given string is: 13
PS D:\Coding\Python\practical-exam>

Python 3.10.1 64-bit 0 0 0 Live Share Ln 14, Col 1 Spaces: 4 UTF-8 CRLF Python Prettier 11:02 16-02-2022