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1
2 # PPL Lab Assignment 3, PG43 Jaynam Modi, G3
3
4 # Write a Python Program to check if a Number is a Strong Number.
5
6 def factorial(inp):
7     fact = 1
8     for x in range(1, inp+1):
9         fact = fact * x
10    return fact
11
12 def isStrong(inp):
13     strong_check = 0
14     inp = str(inp)
15
16     for x in inp:
17         strong_check += factorial(int(x))
18
19     return int(inp) == strong_check
20
21
22 n = input(" > Enter Number to check : ")
23
24 if isStrong(n):
25     print(" > The Number you Entered is a Strong Number.")
26 else:
27     print(" > The Number you Entered is NOT a Strong Number.")
28
29 # PRACTICE PROBLEMS.
30
31 # 1. Python Program to Check Whether a Number is Positive or Negative.
32
33 def checkPositivity(n):
34     if n == 0:
35         print(" > The number is neither Positive nor Negative.")
36     elif n > 0:
37         print(" > The number is Positive.")
38     else:
39         print(" > The number is Negative.")
40
41 # 2. Python Program to Check if a Number is a Palindrome.
42
43 def checkPalindrome(n):
44     rev = str(n)[::-1]
45     return n == rev
46
47 # 3. Python Program to Check if a Number is a Perfect Number.
48
49 def isPerfect(n):
50     perfect_check = 0
51     for x in range(1, n):
52         if n // x == 0:
53             perfect_check += x
54     return n == perfect_check
55
56 # 4. Python Program to Check if a Number is a Prime Number.
57
58 def isPrime(n):
59     flag = 0
60     for x in range(2, n):
61         if n // x == 0:
62             flag += 1
63     return flag == 0
64
65 # 5. Python Program to Find the Sum of the Digits of the Number.
66
67 def sumOfDigits(n):
68     sum_digits = 0
69     for x in str(n):
70         sum_digits += int(x)
71     return sum_digits
72
73 # 6. Python Program to Find the Factorial of the Number.
74
75 def factorial(inp):
76     fact = 1
77     for x in range(1, inp+1):
78         fact = fact * x
79     return fact

```

```
u0_a362@localhost:~/github/assignments/PPL$ python ppl_assignment_3.py
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```
> Enter Number to check : 145
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```
> The Number you Entered is a Strong Number.
```

```
u0_a362@localhost:~/github/assignments/PPL$ python ppl_assignment_3.py
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```
> Enter Number to check : 534
```

```
> The Number you Entered is NOT a Strong Number.
```

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u0_a362@localhost:~/github/assignments/PPL$ █
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