

```
1 #Enrollment No: 202203103510097
2 #Name: Angat Shah
3 #Branch: B.Tech Computer Science and Engineering
4
5 """ Regular Expression is a meaningful sequence of patterns that attempts to operate on
input text.
6 Regular Expressions are useful in wide variety of text processing tasks. They even used for
validation,
7 data scraping, parsing, etc. """
8
9 """ Python provide in-built module named "re" that can be imported in python as "import re"
10 For more detail study on re you can visit https://docs.python.org/3/library/re.html """
11
12 #Note: Line 1-8 are for your study, it should be removed in final practical.
13 import re
14
15 #We want to search for a 6 letters string startswith (^) A and endswith ($) S. Any string
qualifies the criteria will be considered valid.
16 re_pattern = "^A....S$"
17 my_string = input("-->> Enter your Institute Name: ")
18 check = re.match(re_pattern, my_string) #Method-1
19 if check:
20     print("--> You have entered correct data for your institute.\n")
21 else:
22     print("--> Invalid institute name.\n")
23
24 #We want to match for all (+) decimal digits (\d) in input.
25 re_pattern = "\d+"
26 my_string = input("-->> Enter your address:")
27 decimals = re.findall(re_pattern, my_string) #Method-2
28 print(decimals)
29
30 #We want to search for specific character (\A) in user given input:
31 re_pattern = "\AComputer"
32 my_string = input("-->> Enter your course name:")
33 success = re.search(re_pattern, my_string)
34 if success:
35     print("--> You have enter a correct course name.\n")
36 else:
37     print("--> Invalid course name.\n")
38
39 #We want to validate the use entered Indian mobile number.
40 re_pattern = "^[6789]\d{9}$" #starting with (^) having starting digits 6-9[6789] is decimal
(\d) remaining size of {9} and end($)
41 my_string = input("-->> Enter your Mobile Number: ")
42 match = re.match(re_pattern, my_string)
43 if match:
44     print("--> You have entered valid mobile number.\n")
45 else:
46     print("--> Invalid mobile number.\n")
47
48 re_pattern = "^[a-z0-9]+[\._]*[a-z0-9]+@[a-z]+\.[a-z]{2,3}[\._]?([a-z]{2,3})? $"
49 my_email = input("-->> Enter your e-mail ID: ")
50 match = re.match(re_pattern, my_email)
51 if match:
52     print("--> You have entered valid e-mail ID.\n")
53 else:
54     print("--> Invalid e-mail.\n")
55
56 print("-*-*-*-*END OF PRACTICAL 18-*-*-*-*")
```

