

## SET A

*#1. Write a Python program to demonstrate the zero division error and overflow error*

```
import math
data = 50
try:
    data = data / 0 # data = data / 5
except ZeroDivisionError:
    print("Zero Division Error")
else:
    print("Division successful :", data) #Division successful : 10
try:
    a = math.exp(1000) #math.exp(2)
    print(a) #7.38905609893065

except OverflowError:
    print("Overflow Error")
```

Zero Division Error

Overflow Error

*#2. Write a Python program to find sequences of lowercase letters joined with a underscore*

```
import re
def match(text):
    pattern = '[a-z]+_[a-z]+$'
    if re.search(pattern, text):
        return('Yes')
    else:
        return('No')
print(match(input("Enter Text :")))
```

Enter Text :kalpesh patil tybcs

No

*#3. Write a python program to Check if String Contain Only Defined Characters using Regex*

```
import re
def check(str, pattern):

    if re.search(pattern, str):
        print("Valid String")
    else:
        print("Invalid String")
```

```
pattern = re.compile('^[179]+$')
check('179', pattern)
check('157', pattern)
```

Valid String  
Invalid String

## SET B

*#1. Write a Python program to match a string that contains only upper and lowercase letters, numbers, and underscores. Write a Python program to raised the attribute error, if attribute #class object has no attribute with the name attribute.*

```
import re
def text_match(text):
    patterns = '^[a-zA-Z0-9_]*$'
    if re.search(patterns, text):
        return 'Found a match!'
    else:
        return('Not matched!')

print(text_match("The quick brown fox jumps over the lazy dog."))
print(text_match("Python_is_1_Programming_language"))
```

Not matched!  
Found a match!

*#1. Write a Python program to match a string that contains only upper and lowercase letters, numbers, and underscores. Write a Python program to raised the attribute error, if attribute #class object has no attribute with the name attribute.*

```
import re
def text_match(text):
    patterns = '^[a-zA-Z0-9_]*$'
    if re.search(patterns, text):
        return 'Found a match!'
    else:
        return('Not matched!')

print(text_match("The quick brown fox jumps over the lazy dog."))
print(text_match("Python_is_1_Programming_language"))
```

Not matched!  
Found a match!

*#3. Write a python to| Remove all characters except letters and numbers*

```
import re
my_string = "python123:,.@! abc"
print ("The string is : ")
print(my_string)
result = re.sub('[\W_]+', '', my_string)
```

```
print ("The String after Removal is :")  
print(result)
```

```
The string is :  
python123:, .@! abc  
The String after Removal is :  
python123abc
```