

Q.1) Write a code to Read a file and append lines to a list.

```
list = []
with open("abc.txt", "r") as file:
    for line in file:
        list.append(line.strip())
print(list)
```

```
"D:\CDAC VITA\PYTHON\Logic\Scripts\python.exe" "D:/CDAC VITA/PYTHON/Final_Python_Logic/Day 03/t
[]
Process finished with exit code 0
```

Q.2) Write a code to catch an Exception in python?

```
try:
    x=int('abc')
except ValueError:
    print('An Error has Occured')
```

```
"D:\CDAC VITA\PYTHON\Logic\Scripts\python.exe" "D:/CDAC VITA/PYTHON/Final_Python_Logic/Day 03/t
An Error has Occured

Process finished with exit code 0
```

Q.3) Write a Python function that accepts a list containing strings and integers. Merge all string elements using # and add all integer elements.
e.g. input list is ['100', 'welcome', 'hi', '200', '300', 'bye', 'welldone', '500'] Output should be:
welcome#hi#bye#welldone# 1100

```
list = ['100', 'welcome', 'hi', '200', '300', 'bye', 'welldone', '500']

def merge_list(list):
    total = 0
    str = ""

    for i in list:
        if i.isdigit():
            total+=int(i)
        else:
            str += i + '#'

    print(str, ",total)

merge_list(list)
```

```
"D:\CDAC VITA\PYTHON\Logic\Scripts\python.exe" "D:/CDAC VITA/PYTHON/Final_Python_logic/Day 03/t
welcome#hi#bye#welldone# 1100

Process finished with exit code 0
```

Q.4) Write a script to sort a dictionary based on its values and find the sum of middle two values

```
input_dict = {"x": 5, "y": 15, "z": 25}
```

Output: Sorted Dictionary: {'x': 5, 'y': 15, 'z': 25}

Sum of middle two values: $15 + 5 = 20$

or

```
input_dict = {"x": 5, "y": 15, "z": 25, "p": 12}
```

Output: Sorted Dictionary: {'x': 5, 'p': 12, 'y': 15, 'z': 25}

Sum of middle two values: $12 + 15 = 27$

```
mydict = {"x": 5, "y": 15, "z": 25, "p": 12}

sort = dict(sorted(mydict.items(), key=lambda x: x[1]))
print("Sorted Dictionary:", sort)

val = list(sort.values())

mid_sum = val[len(val)//2] + val[len(val)//2 - 1]
print("Sum of middle two values:", mid_sum)
```

```
"D:\CDAC VITA\PYTHON\Logic\Scripts\python.exe" "D:/CDAC VITA/PYTHON/Final_Python_logic/Day 03/t
Sorted Dictionary: {'x': 5, 'p': 12, 'y': 15, 'z': 25}
Sum of middle two values: 27

Process finished with exit code 0
```