

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

```
list1 = []

with open("D:\\CDAC\\PROJECT\\HNM Project\\Data.txt", "r") as file:
    for line in file:
        list1.append(line.strip())

print(list1)
```

op→

```
"D:\\CDAC\\Python By Nitin Sir\\PythonFiles\\.venv\\Scripts\\python.exe" "D:\\CDAC\\Python By Nitin Sir\\PythonFiles\\Python Preparation\\Python_test3.py":4: SyntaxWarning
  with open("D:\\CDAC\\PROJECT\\HNM Project\\Data.txt", "r") as file:
['Hi hello How are you!', 'I am fine']

Process finished with exit code 0
|
```

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

```
try:
    n1=int(input("Enter the number1: "))
    n2=int(input("Enter the number2: "))
    sum=n1+n2
    print(sum)
except Exception as e:
    print("Please enter a Integer ")
```

op->

```
"D:\\CDAC\\Python By Nitin Sir\\PythonFiles\\.venv\\
Enter the number1: 5
Enter the number2: h
Please enter a Integer

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#

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Op->

```
list1=['100', 'welcome', 'hi', '200', '300', 'bye', 'welldone', '500']
sum=0
string=""
for i in list1:
    if i.isdigit():
        sum=sum+int(i)
    else:
        string=string+i+'#'
print(string)
print(sum)
```

```
"D:\CDAC\Python By Nitin Sir\PythonFiles
welcome#hi#bye#welldone#
1100

Process finished with exit code 0
```

**Q4)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

```
def dictsort(d):
    n=len(d)
    values=sorted(d.values())
    if n==0:
        print("Dictionary is empty")
    elif n==1:
        mid=values[0]+values[0]
        print("sum is: ",mid)
    elif n%2==0:
        mid=values[(n//2)+1]+values[n//2]
```

```
print("sum is: ", mid)
else:
    mid=values[(n//2)-1]+values[n//2]
    print("sum is: ", mid)

print("Sorted Dictionary is : ",dict(sorted(d.items(),key=lambda item: item[1])))
```

dictsort(input_dict)

op→

```
Input Dict is: {'x': 5, 'y': 15, 'z': 25, 'p': 10}
sum is: 40
Sorted Dictionary is : {'x': 5, 'p': 10, 'y': 15, 'z': 25}

Process finished with exit code 0
```