

Q.1) Write a code to catch an Exception in python?

Code

```
try:  
    a = int(input("Enter a number: "))  
  
    b = int(input("Enter another number: "))  
  
    result = a / b  
  
    print("Result:", result)  
  
  
except ZeroDivisionError:  
    print("Cannot divide by zero!")
```

OUTPUT:

```
C:\Users\Admin\PyCharmMiscProject\.venv\Scripts\python.exe C:\Users\Admin\PyCharmMiscProject\Q.6.py
Enter a number: 2
Enter another number: 0
Cannot divide by zero!

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']"
```

Code:

```
def process_list(data):
    string\ parts = \['
```

```
integer\ sum =
```

```
for item in data:
```

if item isdig

integer) sum

```

        else:
            string\_parts.append(item)

merged\_string = "#".join(string\_parts)

return merged\_string, integer\_sum

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

result_string, result_sum = process_list(lst)

print("Merged String:", result_string)
print("Sum of Numbers:", result_sum)

```

OUTPUT:

```

C:\Users\Admin\PyCharmMiscProject\.venv\Scripts\python.exe C:\Users\Admin\PyCharmMiscProject\Q.7.py
Merged String: welcome#hi#bye#welldone
Sum of Numbers: 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

```

Code:

```

= {"x": 5, "y": 15, "z": 25}
s = sorted(d.items(), key=lambda x: x[1])
vals = [v for k, v in s]
print("Sorted Dictionary:", dict(s))
print("Sum:", vals[len(vals)//2] + vals[len(vals)//2 - 1])

```

OUTPUT :

```

C:\Users\Admin\PyCharmMiscProject\.venv\Scripts\python.exe C:\Users\Admin\PyCharmMiscProject\Q.8.py
Sorted Dictionary: {'x': 5, 'y': 15, 'z': 25}
Sum: 20

Process finished with exit code 0

```