

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 = 0
    for item in data:
        if item.isdigit():
            integer_sum += int(item)
```

```

        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

```