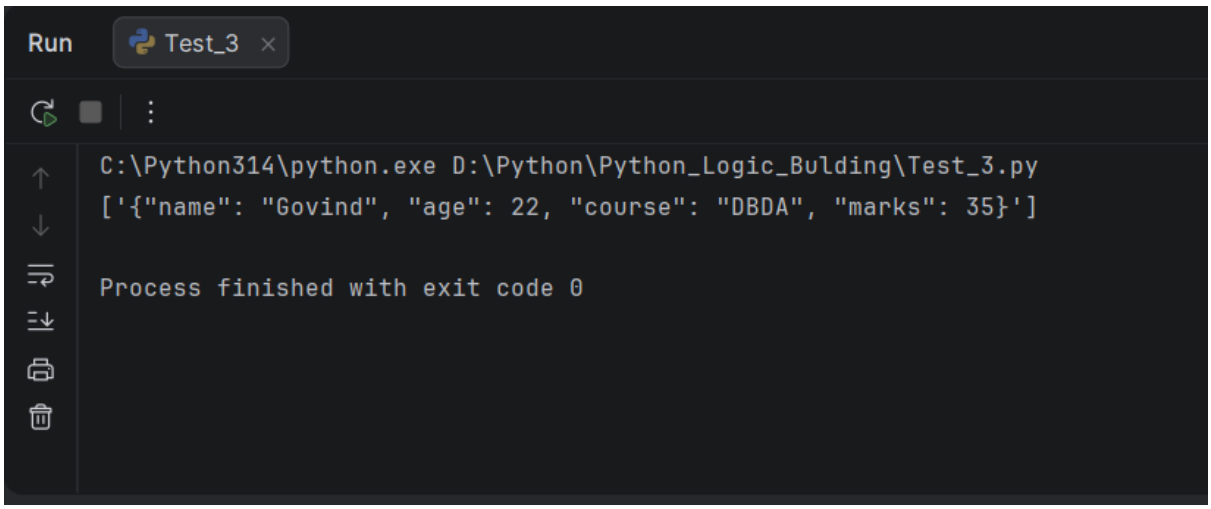
PYTHON

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

Code:

```
list = []
with open('student.json', 'r') as file:
    for lines in file:
        list.append(lines.strip())
print(list)
```

Output:



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

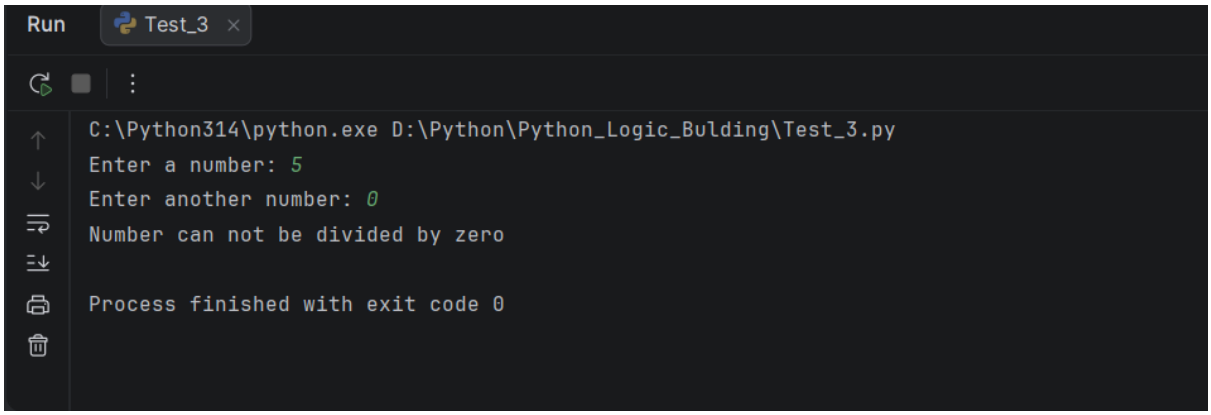
Code:

```
try:
    a=int(input("Enter a number: "))
    b=int(input("Enter another number: "))
    c=a/b
    print(c)
```

except ZeroDivisionError:

    print("Number can not be divided by zero")

Output:



'''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 '''

Code:

```
def fun(mylist):
    string_part = ""
    sum_part = 0

    for item in mylist:
        if item.isdigit():
            sum_part += int(item)
```

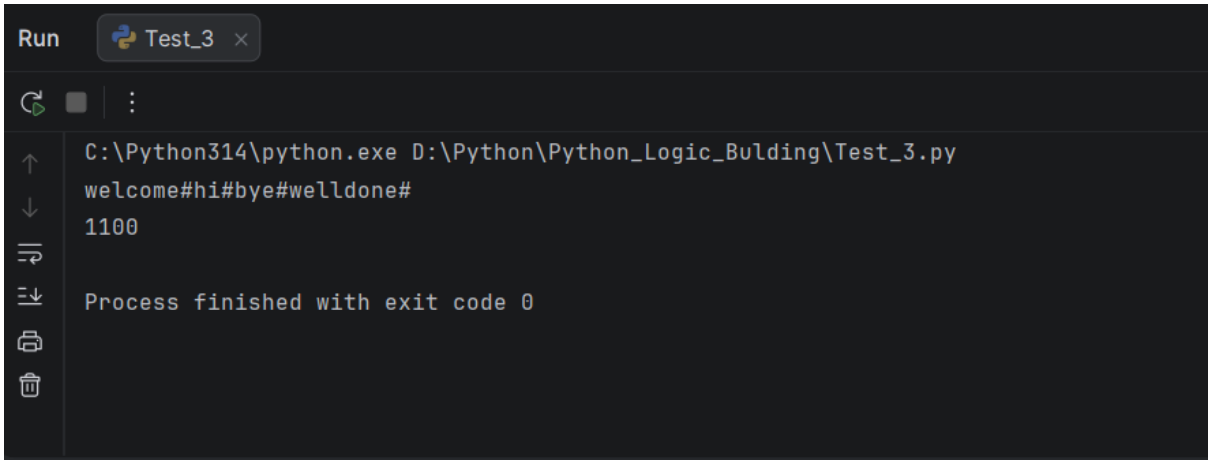
```
        else:
            string_part += item + "#"

    return string_part, sum_part


Mylist = ['100', 'welcome', 'hi', '200', '300', 'bye', 'welldone', '500']
result = fun(Mylist)

print(result[0])
print(result[1])
```

Output:



'''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 '''

Code:

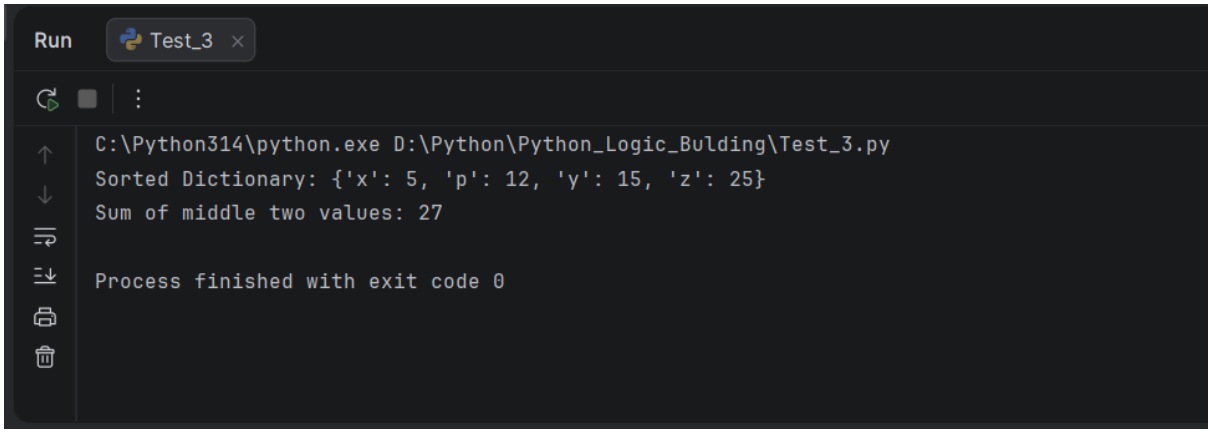
```
d = {"x": 5, "y": 15, "z": 25,"p":12}

# sort dictionary by values
sd = dict(sorted(d.items(), key=lambda x: x[1]))
print("Sorted Dictionary:", sd)

# get values and add middle two
v = list(sd.values())
mid_sum = v[len(v)//2 - 1] + v[len(v)//2]

print("Sum of middle two values:", mid_sum)
```

Output:


Run
Test_3
C:\Python314\python.exe D:\Python\Python_Logic_Bulding\Test_3.py
Sorted Dictionary: {'x': 5, 'p': 12, 'y': 15, 'z': 25}
Sum of middle two values: 27
Process finished with exit code 0