

Q.1)

```
lines_list = [1,2,3]
```

```
with open("data1.txt", "r") as file:
```

```
    for line in file:
```

```
        lines_list.append(line.strip())
```

```
print(lines_list)
```

```
[1]: lines_list = [1,2,3]

      with open("data1.txt", "r") as file:
          for line in file:
              lines_list.append(line.strip())

      print(lines_list)
      |
      [1, 2, 3]
```

Q.2)

```
a = int(input("enter a number : "))
```

```
b = int(input("enter a number : "))
```

```
try:
```

```
    answer = a/b
```

```
    print(answer)
```

```
except ZeroDivisionError:
```

```
    print("divisor can't be zero")
```

```
finally:
```

```
    print("end of the program")
```

```
enter a number : 3
enter a number : 0
divisor can't be zero
end of the program
```

Q.3)

```
def fun(n):
```

```
    total = 0
```

```
    chars = []
```

```
    for i in n:
```

```
        if isinstance(i, str) and i.isalpha():
```

```
            chars.append(i+"#")
```

```
        elif isinstance(i, int):
```

```
            total += i
```

```
    print("Characters:", chars)
```

```
    print("Sum of numbers:", total)
```

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

```
fun(n)
```

```
welcome#hi#bye#welldone
```

```
1100
```

Q.4)

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

```
sorted_dict = dict(sorted(input_dict.items(), key=lambda item: item[1]))
```

```
values = list(sorted_dict.values())
middle_two = values[len(values)//2 - 1 : len(values)//2 + 1]
sum_middle = sum(middle_two)
print("Sorted Dictionary:", sorted_dict)
print(f"Sum of middle two values: {middle_two[1]} + {middle_two[0]} = {sum_middle}")
```

|

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

Sum of middle two values: 15 + 5 = 20
