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

```python
list = ["DBDA"]
with open(r"C:\Users\admin\Desktop\sample.txt", "r") as file:
    for line in file:
        list.append(line.strip())
print(list)
```

```
['DBDA', 'hello', 'hii']

Process finished with exit code 0
```

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

```python
try:
    a=int(input("Enter first number "))
    b=int(input("Enter second number "))
    result = a / b
    print(result)
except Exception as e:
    print("Error:", e)
```

without error-

```
Enter first number 10
Enter second number 5
2.0
```

With error-

```
Enter first number p
Error: invalid literal for int() with base 10: 'p'
```

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']

```
def list(data):
    s = []
    total = 0
    for i in data:
        if i.isdigit():
            total += int(i)
        else:
            s.append(i)
    return "#".join(s), total


data = ['100', 'welcome', 'hi', '200', '300', 'bye', 'welldone', '500']
print(list(data))
```

```
('welcome#hi#bye#welldone', 1100)
```

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}

```
data={"x": 5, "y": 15, "z": 25}
data1=dict(sorted(data.items(), key=lambda x: x[1]))
vals = list(data1.values())
n = len(vals)
mid = n // 2
if n % 2 == 0:
    print(data1)
    print(vals[mid - 1] + vals[mid])
else:
    print(data1)
    print(vals[mid - 1] + vals[mid])
```

```
{'x': 5, 'y': 15, 'z': 25}
20
```