task-1

In [1]:
```
str_lists = ["faiz razaf", "ghufrang", "usamau"]
def coun(str_lists):
    for i in str_lists:
        print(len(i))
coun(str_lists)
```

```
10
8
6
```

task-2

In [3]:
```
sample_list = [(2, 5), (1, 2), (4, 4), (2, 3), (2, 1)]

sorted_list = sorted ( sample_list, key = lambda x : x [-1])
sorted_list
```

Out[3]:
```
[(2, 1), (1, 2), (2, 3), (4, 4), (2, 5)]
```

task-3

In [19]:
```
List = [1,0,6,2,0.8,9,'Jamal','Adeel','Hamza','Ali','Jawad','C','Q','P']

result1 = sorted(filter(lambda x: isinstance(x, (int, float)), List))
result2 = sorted(filter(lambda x: isinstance(x, str) and x[0] in ['J', 'A'], Li
result3 = sorted(filter(lambda x: isinstance(x, str), List), reverse=True)
result4 = sorted(filter(lambda x: isinstance(x, str) and len(x) == 1, List))
result5 = list(map(lambda x: x * 5 if isinstance(x, (int, float)) else x, List)


print("Result 1:", result1)
print("Result 2:", result2)
print("Result 3:", result3)
print("Result 4:", result4)
print("Result 5:", result5)
```

```
Result 1: [0, 0.8, 1, 2, 6, 9]
Result 2: ['Adeel', 'Ali', 'Jamal', 'Jawad']
Result 3: ['Q', 'P', 'Jawad', 'Jamal', 'Hamza', 'C', 'Ali', 'Adeel']
Result 4: ['C', 'P', 'Q']
Result 5: [5, 0, 30, 10, 4.0, 45, 'Jamal', 'Adeel', 'Hamza', 'Ali', 'Jawad',
'C', 'Q', 'P']
```

task-4

In [22]:
```python
def read():
    try:
        # Read the content from the file
        with open("Try.txt", "r") as file:
            content = file.read()
        print(content)
    except FileNotFoundError:
        print("File does not exist.")


def write():
    try:
        # Result from the upper question
        result1 = [0, 0.8, 1, 2, 6, 9]
        result2 = ['Jamal', 'Adeel', 'Hamza', 'Ali', 'Jawad']
        result3 = ['Adeel', 'Ali', 'Hamza', 'Jamal', 'Jawad']
        result4 = ['C', 'P', 'Q']
        result5 = [5, 0, 30, 10, 4.0, 45, 'Jamal', 'Adeel', 'Hamza', 'Ali', 'Ja

        # Save the results in separate files
        with open("Question1.txt", "w") as file:
            file.write(str(result1))
        with open("Question2.txt", "w") as file:
            file.write(str(result2))
        with open("Question3.txt", "w") as file:
            file.write(str(result3))
        with open("Question4.txt", "w") as file:
            file.write(str(result4))
        with open("Question5.txt", "w") as file:
            file.write(str(result5))
        print("Results saved successfully.")
    except Exception as e:
        print(f"Error occurred: {str(e)}")


# Call the functions
read()
write()
```

```
[W 08:57:12.902 NotebookApp] Loading JupyterLab as a classic notebook (v6) ex
tension.
[W 2023-07-11 08:57:12.907 LabApp] 'notebook_dir' has moved from NotebookApp
to ServerApp. This config will be passed to ServerApp. Be sure to update your
config before our next release.
[W 2023-07-11 08:57:12.907 LabApp] 'notebook_dir' has moved from NotebookApp
to ServerApp. This config will be passed to ServerApp. Be sure to update your
config before our next release.
[I 2023-07-11 08:57:12.916 LabApp] JupyterLab extension loaded from C:\Progra
mData\anaconda3\lib\site-packages\jupyterlab
[I 2023-07-11 08:57:12.916 LabApp] JupyterLab application directory is C:\Pro
gramData\anaconda3\share\jupyter\lab
[I 08:57:16.089 NotebookApp] Serving notebooks from local directory: C:\Users
\faizr
[I 08:57:16.089 NotebookApp] Jupyter Notebook 6.5.2 is running at:
[I 08:57:16.090 NotebookApp] http://localhost:8888/?token=49c82ecac974c714b7c
cb8ff7ffe74d899959a18d23b9665 (http://localhost:8888/?token=49c82ecac974c714b
7ccb8ff7ffe74d899959a18d23b9665)
[I 08:57:16.090 NotebookApp]  or http://127.0.0.1:8888/?token=49c82ecac974c71
4b7ccb8ff7ffe74d899959a18d23b9665 (http://127.0.0.1:8888/?token=49c82ecac974c
714b7ccb8ff7ffe74d899959a18d23b9665)
[I 08:57:16.090 NotebookApp] Use Control-C to stop this server and shut down
all kernels (twice to skip confirmation).
[C 08:57:16.177 NotebookApp]

Results saved successfully.
```

In [ ]: