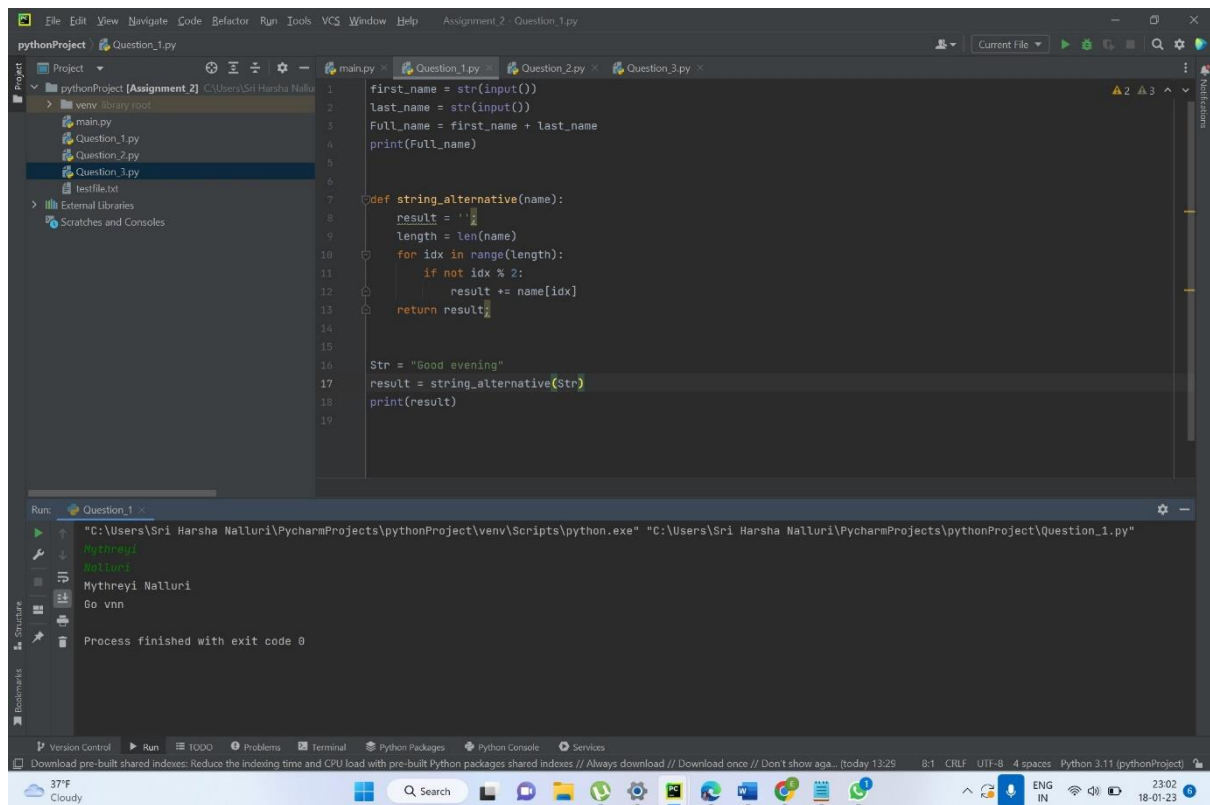


## Question 1

Used two variables `first_name` and `last_name` to store the value given by the user and used `+` operator to concatenate both strings and stored that value in another variable named `full_name`.

For the string alternative created a function named `string_alternative` and created a variable named `result` to store the final output and length for storing the length of the string and used for loop and stored alternative character of the string in the result and print the result.



The screenshot shows the PyCharm IDE interface. The main editor window displays the code for `Question_1.py`. The code is as follows:

```
1 first_name = str(input())
2 last_name = str(input())
3 Full_name = first_name + last_name
4 print(Full_name)
5
6
7 def string_alternative(name):
8     result = ''
9     length = len(name)
10    for idx in range(length):
11        if not idx % 2:
12            result += name[idx]
13    return result
14
15
16 Str = "Good evening"
17 result = string_alternative(Str)
18 print(result)
19
```

The Run window at the bottom shows the execution of `Question_1.py`. The command executed is `"C:\Users\Sri Harsha Nalluri\PycharmProjects\pythonProject\venv\Scripts\python.exe" "C:\Users\Sri Harsha Nalluri\PycharmProjects\pythonProject\Question_1.py"`. The output is:

```
Python>
Nalluri
Mythreyi Nalluri
Go vnn
Process finished with exit code 0
```

The status bar at the bottom indicates the file encoding is UTF-8, 4 spaces, and the Python version is 3.11.

## Question 2

Created a text file named `testfile.txt` as the input file and used the `open` function for opening the input file. Created a list named `lst` to store the words in the `testfile.txt` and used for to traverse the lines of the `testfile.txt`. In order to store words in list used the `split` function and stored all words in `lst` and used the `count` function to count the words that are stored in `lst` and print it.

The screenshot displays the PyCharm IDE interface. The main editor window shows a Python script named `Question_2.py` with the following code:

```
1 fname = input("enter file name")
2 fh = open(fname)
3 lst = list()
4 for line in fh:
5     word = line.rstrip().split()
6     for element in word:
7         lst.append(element)
8
9 counts = [print(lst.count(item), item) for item in set(lst)]
10
```

The left sidebar shows the project structure for `pythonProject (Assignment 2)`, including files like `main.py`, `Question_1.py`, `Question_2.py`, `Question_3.py`, and `testfile.txt`.

The bottom panel shows the output of running `Question_2.py`. The command prompt shows the file name `testfile.txt` being entered. The output lists the frequency of each word in the file:

```
1 Deep
1 Learning
2 Course
1 Python

Process finished with exit code 0
```

The status bar at the bottom indicates the current file is `Question_2.py`, the encoding is `UTF-8`, and the Python version is `Python 3.11 (pythonProject)`.

### Question 3

Created a variable named `data` for storing the input taken from the console and created a function for converting inches into centimetres. Created a new list for storing the converted data, appended the values to the list, and printed it.

The screenshot displays the PyCharm IDE interface. The main editor window shows a Python script named `Question_2.py` with the following code:

```
1 fname = input("enter file name")
2 fh = open(fname)
3 lst = list()
4 for line in fh:
5     word = line.rstrip().split()
6     for element in word:
7         lst.append(element)
8
9 counts = [print(lst.count(item), item) for item in set(lst)]
10
```

The left sidebar shows the project structure for `pythonProject (Assignment 2)`, including files like `main.py`, `Question_1.py`, `Question_2.py`, `Question_3.py`, and `testfile.txt`.

The bottom panel shows the output of running the script. The command prompt displays the file name `testfile.txt` and the resulting word counts:

```
enter file name: testfile.txt
1 Deep
1 Learning
2 Course
1 Python
```

The status bar at the bottom indicates the file encoding is UTF-8, the line length is 9:1, and the Python version is 3.11.

Video link:

<https://drive.google.com/file/d/1fFp9MBU-I9J8hdjEOFD0Ej1u7cAE05UI/view?usp=sharing>