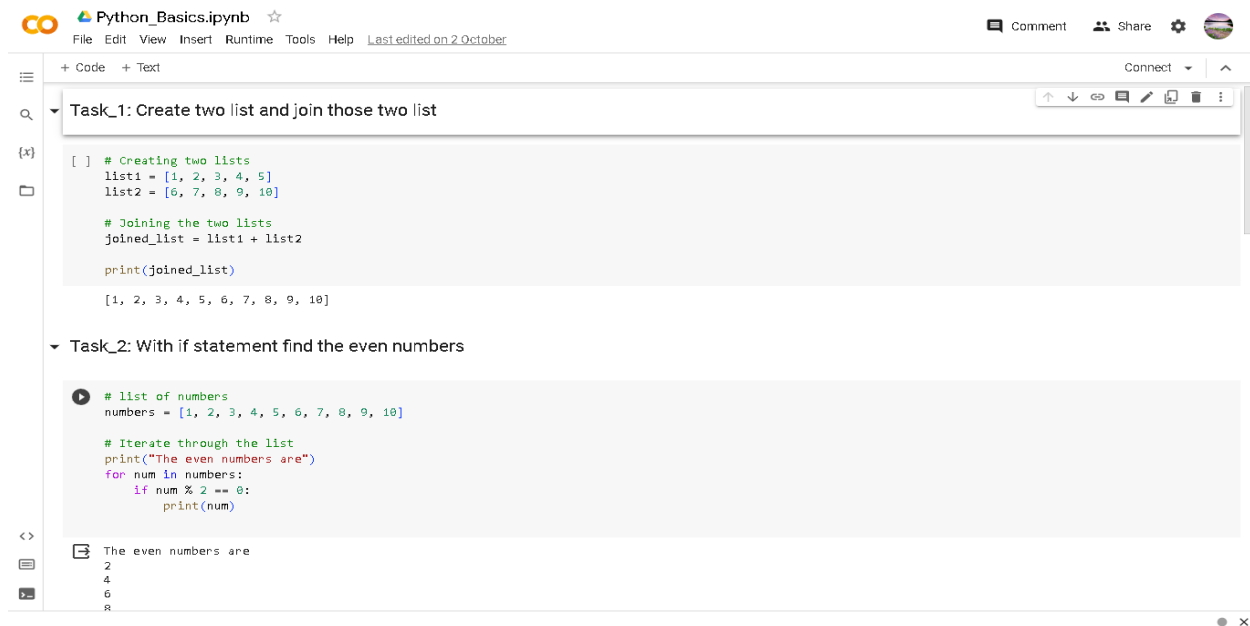


# Assignment – 4

## Python Basics

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The screenshot shows a Jupyter Notebook titled "Python\_Basics.ipynb". The interface includes a top menu bar with "File", "Edit", "View", "Insert", "Runtime", "Tools", and "Help". Below the menu is a toolbar with icons for "Code", "Text", "Connect", and other functions. The notebook content is divided into two tasks:

**Task\_1: Create two list and join those two list**

```
[ ] # Creating two lists
list1 = [1, 2, 3, 4, 5]
list2 = [6, 7, 8, 9, 10]

# Joining the two lists
joined_list = list1 + list2

print(joined_list)
```

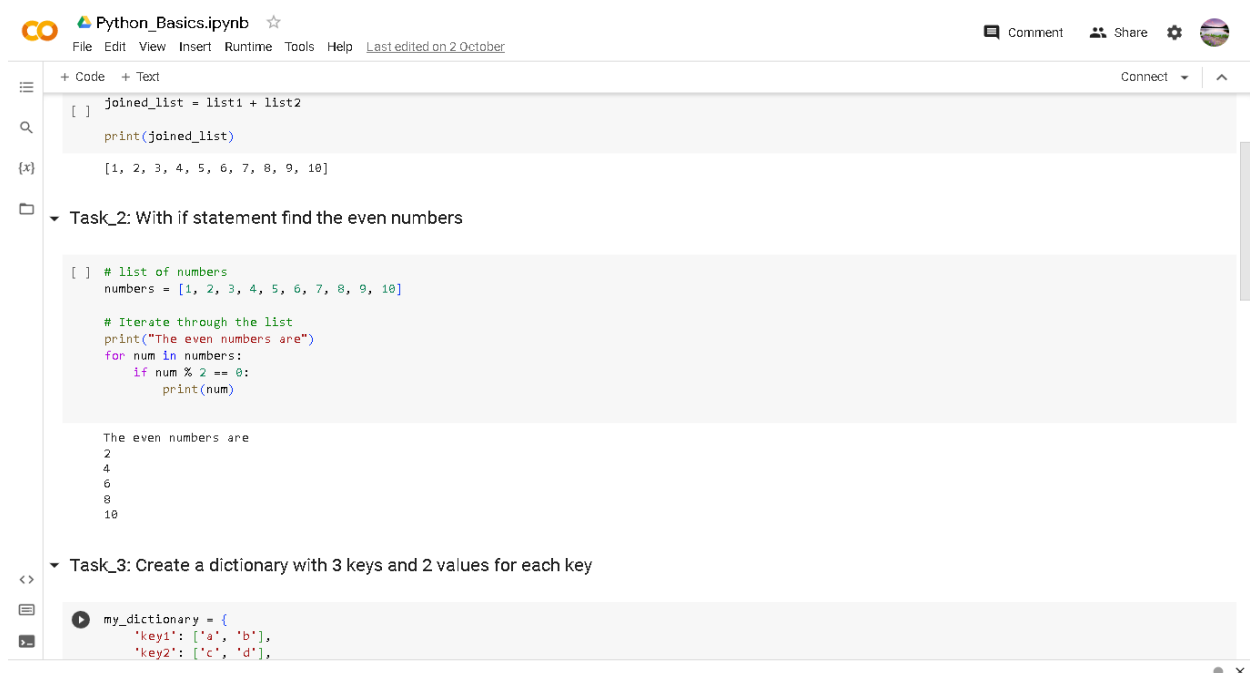
The output of Task 1 is: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

**Task\_2: With if statement find the even numbers**

```
# list of numbers
numbers = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

# Iterate through the list
print("The even numbers are")
for num in numbers:
    if num % 2 == 0:
        print(num)
```

The output of Task 2 is: The even numbers are, 2, 4, 6, 8, 10



The screenshot shows a Jupyter Notebook titled "Python\_Basics.ipynb". The interface includes a top menu bar with "File", "Edit", "View", "Insert", "Runtime", "Tools", and "Help". Below the menu is a toolbar with icons for "Code", "Text", "Connect", and other functions. The notebook content is divided into two tasks:

**Task\_2: With if statement find the even numbers**


```
[ ] # list of numbers
numbers = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

# Iterate through the list
print("The even numbers are")
for num in numbers:
    if num % 2 == 0:
        print(num)
```

The output of Task 2 is: The even numbers are, 2, 4, 6, 8, 10

**Task\_3: Create a dictionary with 3 keys and 2 values for each key**

```
my_dictionary = {
    'key1': ['a', 'b'],
    'key2': ['c', 'd'],
}
```

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Task\_3: Create a dictionary with 3 keys and 2 values for each key


```
[ ] my_dictionary = {
    'key1': ['a', 'b'],
    'key2': ['c', 'd'],
    'key3': ['e', 'f']
}

# Accessing values in the dictionary
print(my_dictionary['key1'])
print(my_dictionary['key2'])
print(my_dictionary['key3'])
```

```
['a', 'b']
['c', 'd']
['e', 'f']
```

Task\_4: Create a function with if statement which is used to find the odd numbers

```
[ ] def find_odd_numbers(numbers):
    odd_numbers = []
    for num in numbers:
        if num % 2 != 0:
            odd_numbers.append(num)
    return odd_numbers
```

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Task\_4: Create a function with if statement which is used to find the odd numbers

```
[ ] def find_odd_numbers(numbers):
    odd_numbers = []
    for num in numbers:
        if num % 2 != 0:
            odd_numbers.append(num)
    return odd_numbers

numbers_list = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
odd_numbers_list = find_odd_numbers(numbers_list)
print("Odd numbers:", odd_numbers_list)
```

```
Odd numbers: [1, 3, 5, 7, 9]
```

Task\_5: Write a python function to sum all the numbers in a list.

Sample list: [8,2,3,0,7]

Expected output: 20

```
[ ] def sum_list(numbers):
    sum = 0
    for num in numbers:
        sum += num
    return sum
```

The screenshot shows a Google Colab notebook interface. At the top, the title bar reads 'Python\_Basics.ipynb' with a star icon and a menu bar containing 'File', 'Edit', 'View', 'Insert', 'Runtime', 'Tools', and 'Help'. A status bar below the menu indicates 'Last edited on 2 October'. On the right side of the title bar are icons for 'Comment', 'Share', and a user profile. The main workspace has a left sidebar with icons for file explorer, search, and a variable inspector. The central area contains the following content:

- A code cell with the text: `Odd numbers: [1, 3, 5, 7, 9]`
- A task instruction: **Task\_5: Write a python function to sum all the numbers in a list.**
- A sample input: **Sample list: [8,2,3,0,7]**
- An expected output: **Expected output: 20**
- A code cell containing a Python function definition and its usage:

```
[ ] def sum_list(numbers):  
    sum = 0  
    for num in numbers:  
        sum += num  
    return sum  
  
# Example usage  
sample_list = [8, 2, 3, 0, 7]  
result = sum_list(sample_list)  
print("Sum of the numbers:", result)  
  
Sum of the numbers: 20
```

At the bottom of the notebook, there is a terminal icon and a status bar with a close button.

Python file link:

[https://colab.research.google.com/drive/1VA73\\_yIN\\_gASZh7IGR6Gnehux4iu31Xa?usp=sharing](https://colab.research.google.com/drive/1VA73_yIN_gASZh7IGR6Gnehux4iu31Xa?usp=sharing)