

**NAME : MAVIA ALAM KHAN (2303.KHI.DEG.017)**

**PARTNER: MUHAMMAD HUSSAM(2303.KHI.DEG.020)**

## **ASSIGNMENT\_DAY-5**

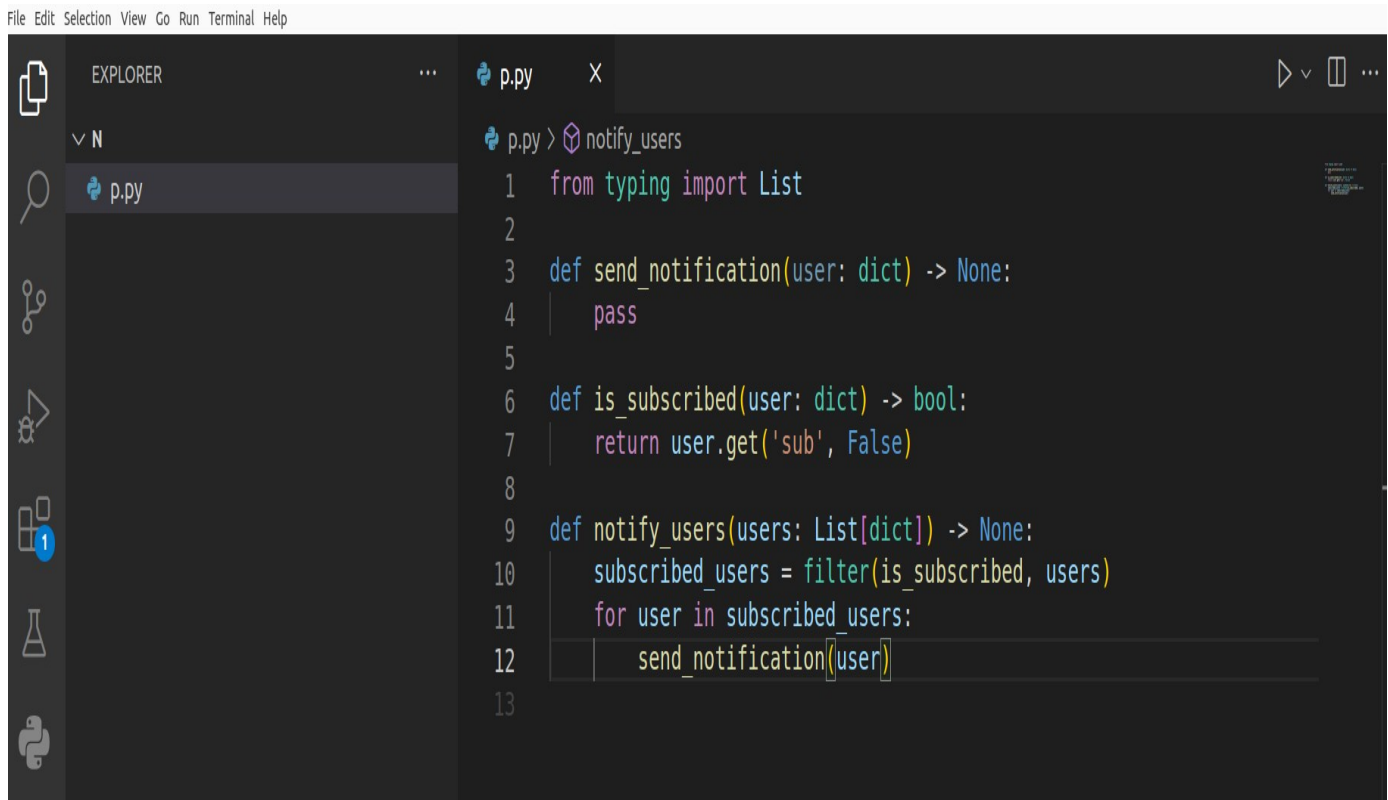
---

**Refactor following code:**

```
from typing import List
import pandas as pd
class User:
    sub: bool
def notify(user: User) -> None:
    pass
def notify_users(x: List[User]) -> None:
    #Filter users with subscription and notify them.
    for u in x:
        if u.sub:
            # u.notify()
            notify(u)
```

## **SOLUTION:**

Here is the refactored code :



```
File Edit Selection View Go Run Terminal Help
EXPLORER
p.py
p.py
1 from typing import List
2
3 def send_notification(user: dict) -> None:
4     pass
5
6 def is_subscribed(user: dict) -> bool:
7     return user.get('sub', False)
8
9 def notify_users(users: List[dict]) -> None:
10     subscribed_users = filter(is_subscribed, users)
11     for user in subscribed_users:
12         send_notification(user)
13
```

1. Removed **import pandas as pd** as it was unnecessary.
2. Removed **user class** since it is no longer necessary
3. Removed the **notify()** function and created a new **send\_notification()** function that takes a dictionary as a parameter and returns None. This function will be responsible for sending the notification to the user.
4. Created a new function called **is\_subscribed()** that takes a dictionary as a parameter and returns a boolean value. This function will be used to filter the list of users to only include those who have subscribed.
5. Modify the **notify\_users()** function to take a list of dictionaries as a parameter instead of a list of User objects.

6. Use the `filter()` function to filter the list of users based on whether or not they are subscribed. The `is_subscribed()` function is passed as the filter function to evaluate each user.

7. `Loop` through the filtered list of subscribed users and call the `send_notification()` function for each user.