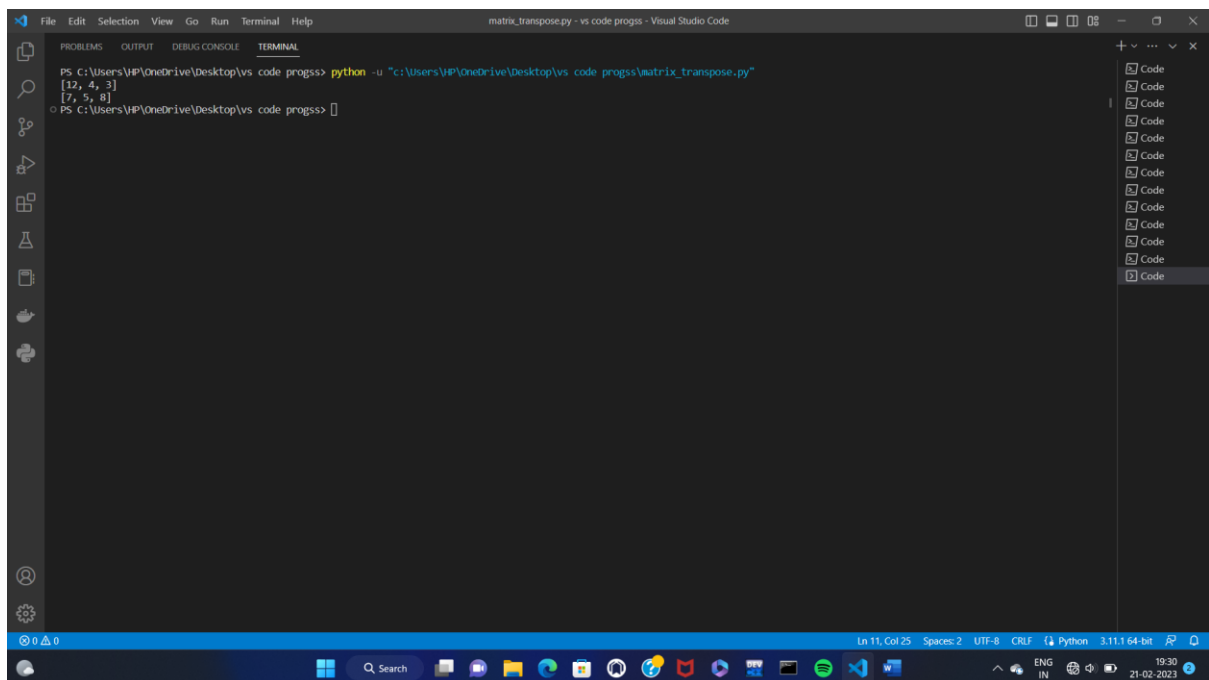


```
# Program to transpose a matrix using a  
nested loop
```

```
X = [[12,7],  
     [4 ,5],  
     [3 ,8]]  
result = [[0,0,0],  
          [0,0,0]]  
# iterate through rows  
for i in range(len(X)):  
    # iterate through columns  
    for j in range(len(X[0])):  
        result[j][i] = X[i][j]  
for r in result:  
    print(r)
```



The screenshot shows a Visual Studio Code editor window titled "matrix_transpose.py - vs code progss - Visual Studio Code". The editor displays the Python code from the previous block. The terminal output shows the execution of the script, which prints the original matrix and its transpose. The terminal text is as follows:

```
PS C:\Users\HP\OneDrive\Desktop\vs code progss> python -u "c:\Users\HP\OneDrive\Desktop\vs code progss\matrix_transpose.py"  
[12, 4, 3]  
[7, 5, 8]  
PS C:\Users\HP\OneDrive\Desktop\vs code progss>
```

The status bar at the bottom of the window indicates the current line and column as "Ln 11, Col 25", the file encoding as "UTF-8", the line ending as "CRLF", the Python version as "3.11.1 64-bit", and the system clock as "19:30 21-02-2023".