











This screenshot shows the Visual Studio Code editor with a file named `task5.py` open. The code in the editor is as follows:

```
55 # print(False)
56
57 #task11
58 numbers = [10, 15, 23, 45, 60, 78, 90]
59 for num in numbers:
60     if num % 5 == 0:
61         print(num)
62
63
```

The terminal window at the bottom shows the execution of the script:

```
PS E:\python programming> ^C
PS E:\python programming>
PS E:\python programming> e.; cd 'e:\python programming'; & 'c:\Users\welcome\AppData\Local\Programs\Python\Python313\python.exe' 'c:\Users\welcome\.vscode\extensions\ms-python.debugpy-2025.8.0-win32-x64\bundled\libs\debugpy\launcher' '65228' '-...' 'e:\python programming\Task5\task5.py'
10
15
45
60
90
PS E:\python programming>
```

The Explorer sidebar on the left shows a project structure with folders for `Task1` through `Task5`, and files like `day2task.py` and `output.pdf`.

This screenshot shows the Visual Studio Code editor with the same file `task5.py`. The code has been updated to include a character input loop:

```
58 # numbers = [10, 15, 23, 45, 60, 78, 90]
59 # for num in numbers:
60 #     if num % 5 == 0:
61 #         print(num)
62
63 #task12
64 char = input("Enter a character: ").lower()
65 if char in 'aeiou':
66     print("Vowel")
67 else:
68     print("Consonant")
69
```

The terminal window shows the execution of the script, including the user input:

```
15
45
60
90
PS E:\python programming> ^C
PS E:\python programming>
PS E:\python programming> e.; cd 'e:\python programming'; & 'c:\Users\welcome\AppData\Local\Programs\Python\Python313\python.exe' 'c:\Users\welcome\.vscode\extensions\ms-python.debugpy-2025.8.0-win32-x64\bundled\libs\debugpy\launcher' '65265' '-...' 'e:\python programming\Task5\task5.py'
Enter a character: a
Vowel
PS E:\python programming>
```

The Explorer sidebar remains the same, showing the project structure.

The screenshot shows the Visual Studio Code editor with a file named `task5.py` open. The file contains two tasks: `task12` and `task13`. `task12` prompts the user to enter a character and prints whether it is a vowel or consonant. `task13` counts the number of even and odd numbers in the range 10 to 56. The terminal window shows the execution of `task13`, with the output: `Even count: 23` and `Odd count: 23`. The Explorer sidebar shows the file structure, including `task5.py` and `task13.py`. The Output window shows the execution of `task13`.

```
63 #task12
64 # char = input("Enter a character: ").lower()
65 # if char in 'aeiou':
66 #     print("Vowel")
67 # else:
68 #     print("Consonant")
69
70 #task13
71 even_count = 0
72 odd_count = 0
73 for i in range(10, 56):
74     if i % 2 == 0:
75         even_count += 1
76     else:
77         odd_count += 1
78 print("Even count:", even_count)
79 print("Odd count:", odd_count)
80
```

Terminal output:

```
elcome\.vscode\extensions\ms-python.debugpy-2025.8.0-win32-x64\bundle\libs\debugpy\launcher '65265' '-...' 'e:\python_programming\Task5\task5.py'
Enter a character: a
Vowel
PS E:\python_programming> ^C
PS E:\python_programming> e; cd 'e:\python_programming'; & 'c:\Users\welcome\AppData\Local\Programs\Python\Python313\python.exe' 'c:\Users\welcome\.vscode\extensions\ms-python.debugpy-2025.8.0-win32-x64\bundle\libs\debugpy\launcher' '65323' '-...' 'e:\python_programming\Task5\task5.py'
Even count: 23
Odd count: 23
PS E:\python_programming>
```

The screenshot shows the Visual Studio Code editor with a file named `task5.py` open. The file contains two tasks: `task14` and `task15`. `task14` prompts the user to enter a number and prints whether it is even or odd. `task15` counts the number of even and odd numbers in the range 1 to 26. The terminal window shows the execution of `task15`, with the output: `Even count: 13` and `Odd count: 13`. The Explorer sidebar shows the file structure, including `task5.py` and `task15.py`. The Output window shows the execution of `task15`.

```
71 # even_count = 0
72 # odd_count = 0
73 # for i in range(10, 56):
74 #     if i % 2 == 0:
75 #         even_count += 1
76 #     else:
77 #         odd_count += 1
78 # print("Even count:", even_count)
79 # print("Odd count:", odd_count)
80
81 #task14
82 for i in range(1, 26):
83     if i % 2 == 0:
84         print(i)
85
```

Terminal output:

```
12
13
14
15
16
17
18
19
20
21
22
23
24
25
PS E:\python_programming>
```

The screenshot shows the Visual Studio Code editor with a file named `task5.py` open. The code includes a loop for printing even and odd counts, followed by a function `task14` that prints numbers 1 to 26, and a function `task15` that calculates the factorial of numbers in a list `[3, 4, 5]`. The terminal window at the bottom shows the execution of the script, displaying the factorial results for 3, 4, and 5.

```
task5.py
77 # odd_count += 1
78 # print("Even count:", even_count)
79 # print("Odd count:", odd_count)
80
81 #task14
82 # for i in range(1, 26):
83 #     if i % 5 != 0:
84 #         print(i)
85 #task15
86 numbers = [3, 4, 5]
87 for num in numbers:
88     factorial = 1
89     for i in range(1, num + 1):
90         factorial *= i
91     print(f"Factorial of {num}: {factorial}")
92
93
```

```
PS E:\python programming> ^C
PS E:\python programming>
PS E:\python programming> e;; cd 'e:\python programming'; & 'c:\Users\welcome\AppData\Local\Programs\Python\Python313\python.exe' 'c:\Users\welcome\.vscode\extensions\ms-python.debugpy-2025.8.0-win32-x64\bundled\libs\debugpy\launcher' '65407' '-.' 'e:\python programming\Task5\task5.py'
Factorial of 3: 6
Factorial of 4: 24
Factorial of 5: 120
PS E:\python programming>
```

The screenshot shows the Visual Studio Code editor with the same file `task5.py`. The code now includes a function `task16` that takes two user inputs, calculates their product, and prints the sum or product based on whether the product is greater than 500. The terminal window shows the execution of the script, displaying the factorial results from the previous run, followed by the input and output for `task16`.

```
task5.py
87 # for num in numbers:
88 #     factorial = 1
89 #     for i in range(1, num + 1):
90 #         factorial *= i
91 #     print(f"Factorial of {num}: {factorial}")
92
93 #task16
94 a = int(input("Enter first number: "))
95 b = int(input("Enter second number: "))
96 product = a * b
97 if product > 500:
98     print("Sum:", a + b)
99 else:
100     print("Product:", product)
101
```

```
Factorial of 3: 6
Factorial of 4: 24
Factorial of 5: 120
PS E:\python programming> ^C
PS E:\python programming>
PS E:\python programming> e;; cd 'e:\python programming'; & 'c:\Users\welcome\AppData\Local\Programs\Python\Python313\python.exe' 'c:\Users\welcome\.vscode\extensions\ms-python.debugpy-2025.8.0-win32-x64\bundled\libs\debugpy\launcher' '65462' '-.' 'e:\python programming\Task5\task5.py'
Enter first number: 30
Enter second number: 20
Sum: 50
PS E:\python programming>
```




