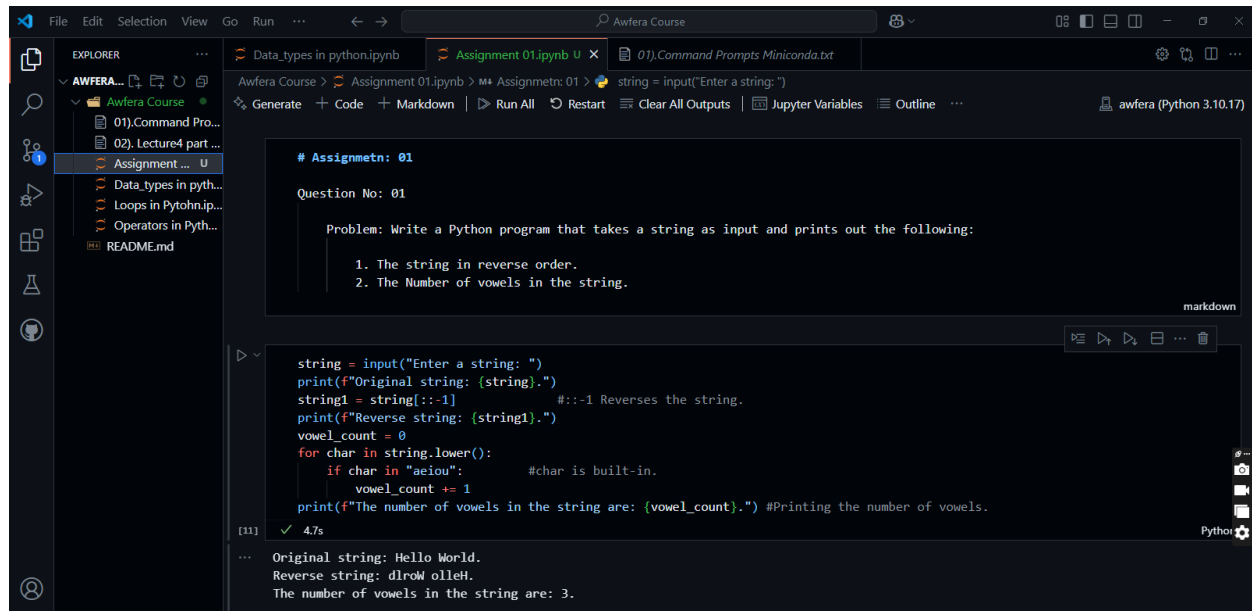


Question No: 01



Awfera Course

EXPLORER

- AWFERA...
- Awfera Course
 - 01).Command Pro...
 - 02). Lecture4 part...
 - Assignment ... U
 - Data_types in pyth...
 - Loops in Pytohn.ip...
 - Operators in Pyth...
 - README.md

Assignment 01.ipynb

Awfera Course > Assignment 01.ipynb > M+ Assignment: 01 > string = input("Enter a string:")

Generate + Code + Markdown | Run All | Restart | Clear All Outputs | Jupyter Variables | Outline

awfera (Python 3.10.17)

Assignment: 01

Question No: 01


Problem: Write a Python program that takes a string as input and prints out the following:

1. The string in reverse order.
2. The Number of vowels in the string.

```
string = input("Enter a string: ")
print(f"Original string: {string}.")
string1 = string[::-1] #::-1 Reverses the string.
print(f"Reverse string: {string1}.")
vowel_count = 0
for char in string.lower():
    if char in "aeiou": #char is built-in.
        vowel_count += 1
print(f"The number of vowels in the string are: {vowel_count}.") #Printing the number of vowels.
```

Original string: Hello World.
Reverse string: dlrow olleH.
The number of vowels in the string are: 3.

Question No: 02



Question No: 02

Create a Python program that:

- Takes an input number from the user.
- Checks whether the number is even or odd.
- Prints the result.

```
even_odd = int(input("Enter a Number: "))
if even_odd % 2 == 0:
    print(f"The {even_odd} number is Even.")
else:
    print(f"The {even_odd} number is Odd.")
```

The 5 number is Odd.

Question No: 03

First create sortenv environment by using command → conda create –n sortenv python= 3.10 or 3.11 etc.

Anaconda Prompt - conda activate sortenv

```
(base) C:\Users\Hammadullah>E:
(base) E:\>cd Python Programming\Awfera Course
(base) E:\Python Programming\Awfera Course>conda activate awfera
(awfera) E:\Python Programming\Awfera Course>code .
(awfera) E:\Python Programming\Awfera Course>conda create -n sortenv python=3.10
Retrieving notices: done
Channels:
 - conda-forge
 - defaults
Platform: win-64
Collecting package metadata (repodata.json): done
Solving environment: done
```

Install numpy library

```
(awfera) E:\Python Programming\Awfera Course>conda activate sortenv
(sortenv) E:\Python Programming\Awfera Course>code .
(sortenv) E:\Python Programming\Awfera Course>conda install numpy
```

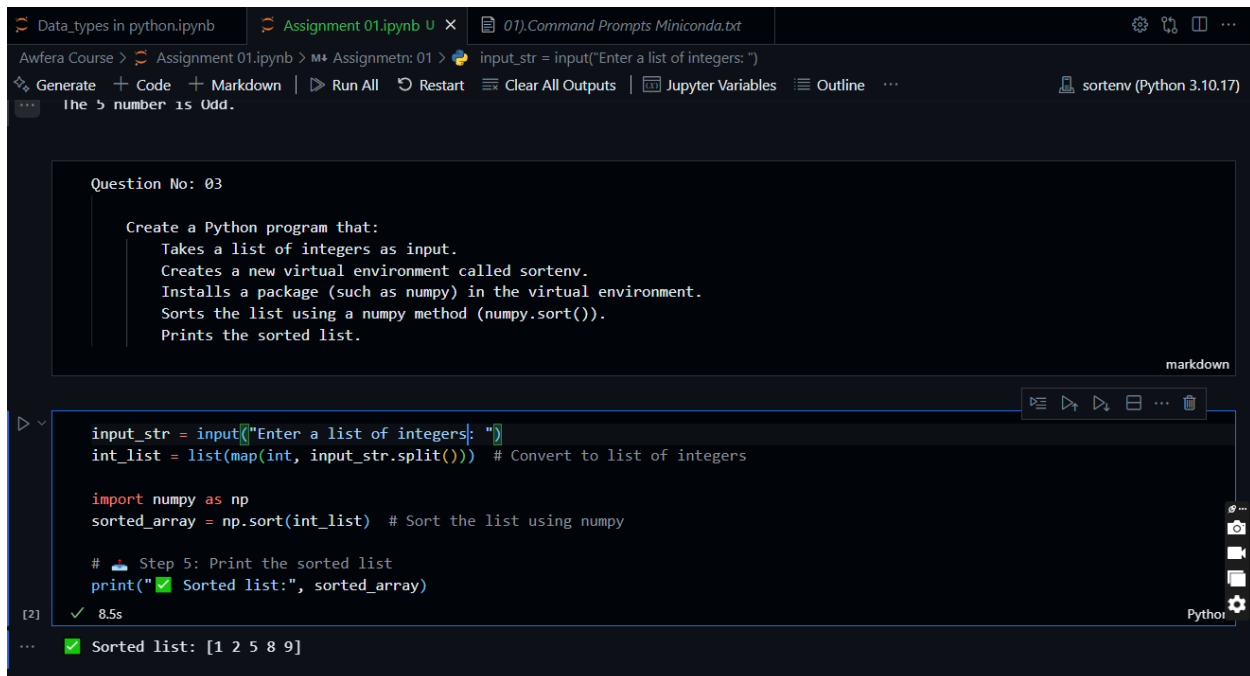
Then activate the environment and then code . press Enter button

```
Downloading and Extracting Packages:

Preparing transaction: done
Verifying transaction: done
Executing transaction: done
#
# To activate this environment, use
#
#     $ conda activate sortenv
#
# To deactivate an active environment, use
#
#     $ conda deactivate

(awfera) E:\Python Programming\Awfera Course>conda activate sortenv

(sortenv) E:\Python Programming\Awfera Course>code .
```



The screenshot shows a Jupyter Notebook window with the following content:

Question No: 03

Create a Python program that:

- Takes a list of integers as input.
- Creates a new virtual environment called sortenv.
- Installs a package (such as numpy) in the virtual environment.
- Sorts the list using a numpy method (numpy.sort()).
- Prints the sorted list.

```
input_str = input("Enter a list of integers: ")
int_list = list(map(int, input_str.split())) # Convert to list of integers

import numpy as np
sorted_array = np.sort(int_list) # Sort the list using numpy

# Step 5: Print the sorted list
print("Sorted list:", sorted_array)
```

[2] ✓ 8.5s

Sorted list: [1 2 5 8 9]

