

Assignment 01

Question 1: Code Along Problem: Write a Python program that takes a string as input and prints out the

Solution:

```
# Q No:1 Solution
string_1=input("Enter a string:")
ans=""
for x in string_1:
    if x in "AEIOUaeiou":
        ans+=x
print("Reversed string: ",string_1[::-1])
print("number of Vowels: ",len(ans))
```

Question 2: Hands-on Coding Project Problem: Create a Python program that: ● Takes an input number from the user. ● Checks whether the number is even or odd. ● Prints the result.

Solution:

```
#Q No:2 Solution
number=int(input("Enter a number: "))
if number%2==0:
    print(f"The number {number} is Even")
elif number%2==1:
    print(f"The number {number} is Odd")
```

Question 3: Virtual Environment Application Problem:
Create a Python program that: 1. Takes a list of integers as input. 2. Creates a new virtual environment called sortenv. 3. Installs a package (such as numpy) in the virtual environment. 4. Sorts the list using a numpy method (numpy.sort()). 5. Prints the sorted list.

Solution:

```
import numpy as np

# Taking a list of integers as input
list_of_integer = list(map(int, input("Enter a list of numbers separated by spaces: ").split()))

# Sorting using NumPy
sorted_list = np.sort(list_of_integer)

# Printing the sorted list
print("Sorted list:", sorted_list)
```