Sanjivani Artificial Intelligence (SAI) Technologies,

Sanjivani College of Engineering, Kopargaon

(An Autonomous Institute)

Sanjivani campus, Kopargaon

Time:1 hour

- 1. Write a Python function that takes two lists and returns True if they have at least one common member.
- 2. Use list comprehension to construct a new list but add 6 to each item.
- 3. Write a Python program to reverse a string.
- 4. Write a Python program to iterate over dictionaries using for loops.
- 5. Using dict comprehension and a conditional argument create a dictionary from the current dictionary where only the key:value pairs with value above 2000 are taken to the new dictionary.
- 6. Open the file data.txt using file operations.
- 7. Define a array ,data = array([11, 22, 33, 44, 55]) find 0 th index 4 th index data
- 8. Write a Python program to filter a list of integers using Lambda.

Original list of integers:

[1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

Even numbers from the said list:

[2, 4, 6, 8, 10]

Odd numbers from the said list:

[1, 3, 5, 7, 9]

9. Write a Pandas program to create the specified columns and rows from a given data frame.

```
name': ['Anna', 'Dinu', Ramu', 'Ganu', 'Emily', 'Mahesh', 'Jayesh', 'venkat', 'Ajay', 'Dhanesh'] 'score': [12.5, 9, 16.5, np.nan, 9, 20, 14.5, np.nan, 8, 19] 'attempts': [1, 3, 2, 3, 2, 3, 1, 1, 2, 1] 'qualify': ['yes', 'no', 'yes', 'no', 'yes', 'yes', 'no', 'yes'] labels = ['a', 'b', 'c', 'd', 'e', 'f', 'g', 'h', 'i', 'j']
```

10. Define a array data = array([11, 22, 33, 44, 55]) and slice it from 1 to 4

- 11. 9. #Write a NumPy program to test if any of the elements of a given array are non-zero. 10. Write a Python program to plot two or more lines and set the line markers.
- 12. Write a Python programming to display a bar chart of the popularity of programming Languages. Sample data:

Programming languages: Java, Python, PHP, JavaScript, C#, C++

Popularity: 22.2, 23.7, 8.8, 8, 7.7, 6.7

