

**School of Engineering and Technology**

**Artificial Intelligence/Machine Learning**

*(Practical File)*

**18BCS-0AI32L**

***Submitted To:***

***Submitted By:***

Name: Parth Singh

Roll Number: 170BTCCSE020

Branch: Computer Science and Engg.

Year/Sem: 3rd Year – 5th Semester

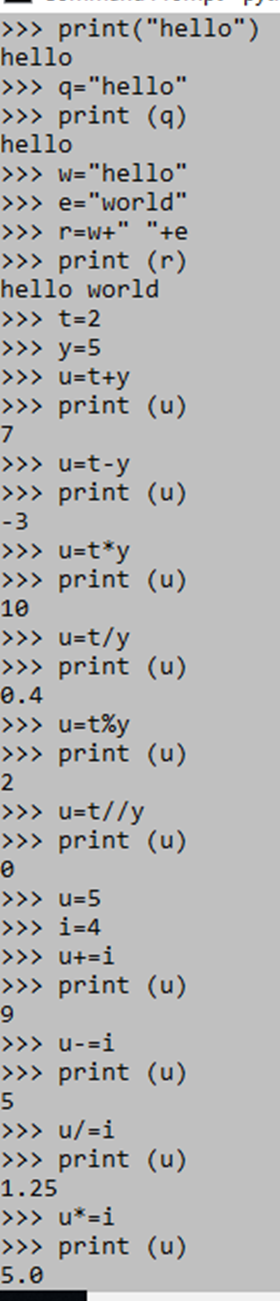
Faculty: Ujjawal

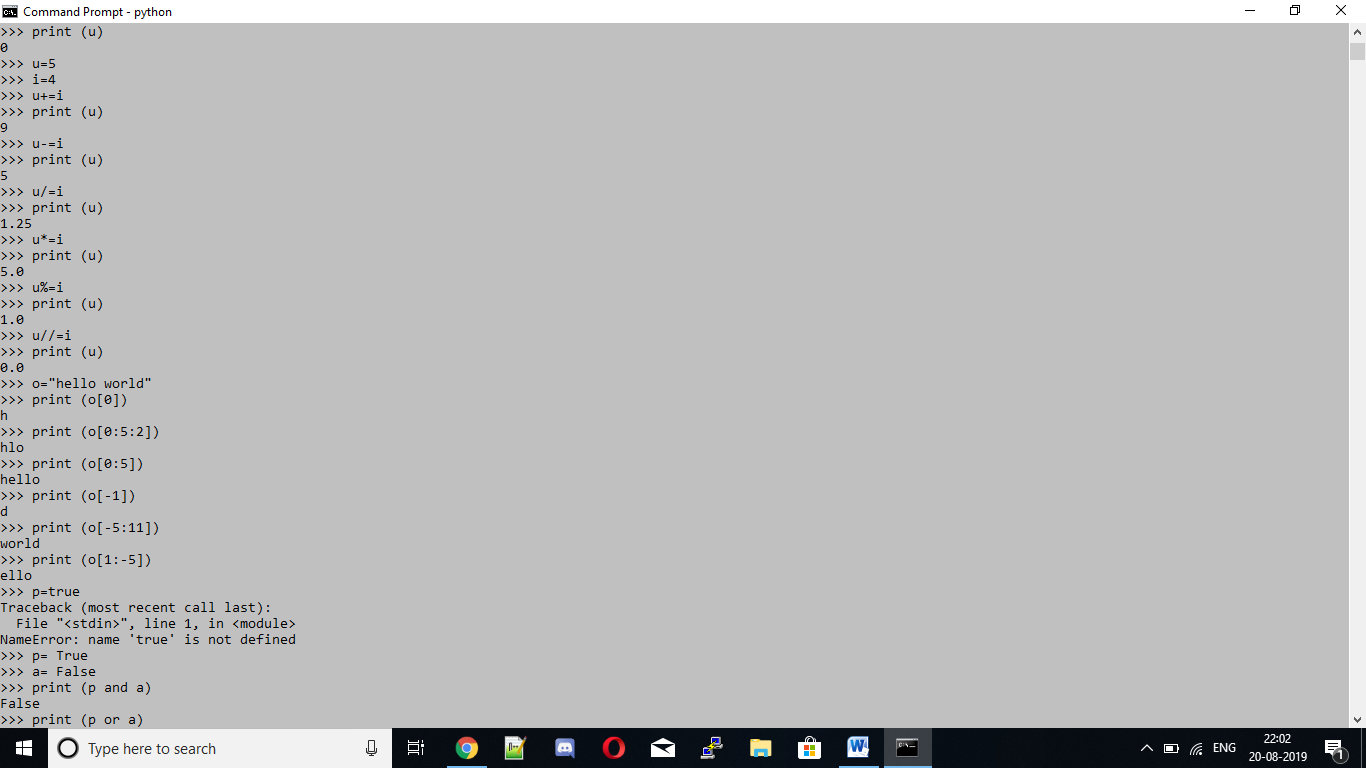
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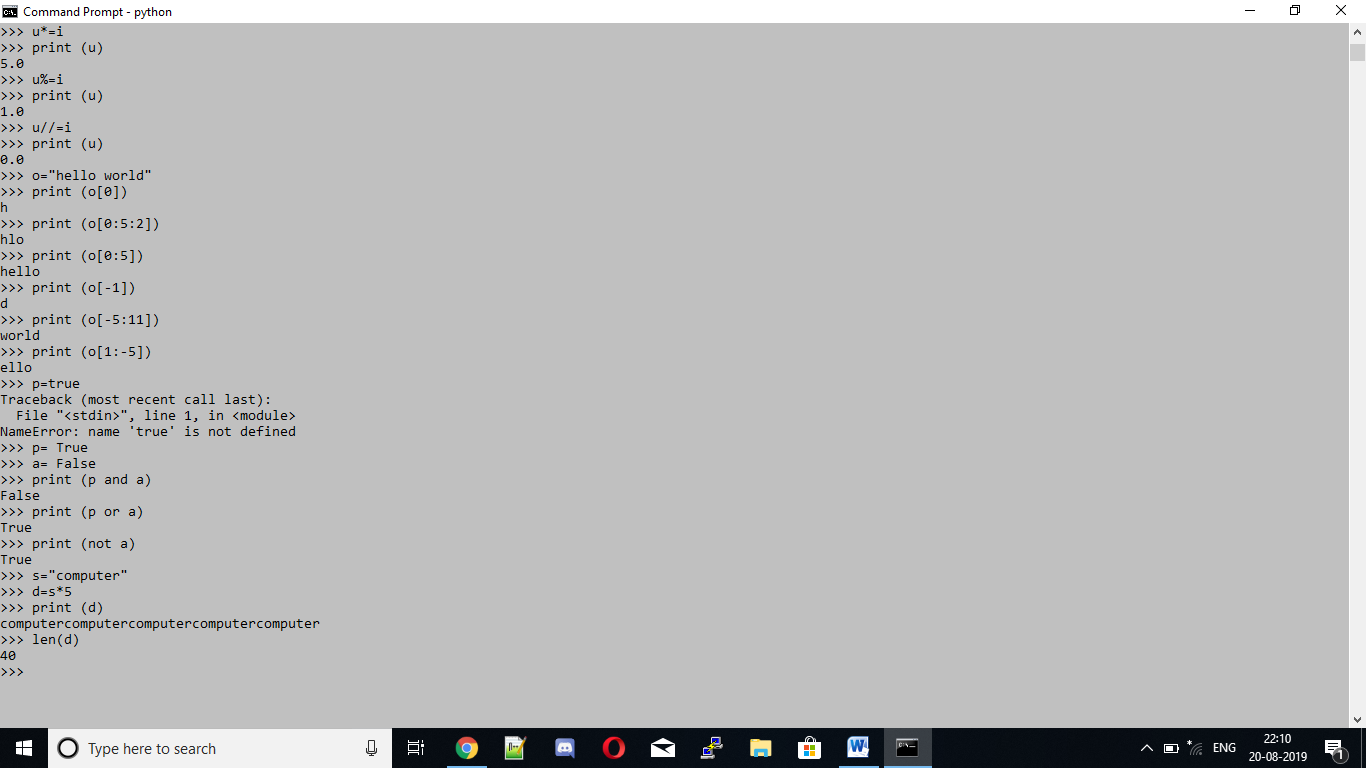
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| **S.No** | **Program Title** | **Date** | **Signature** |
| **1** |  |  |  |
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Program 1: Introduction to python and programming.

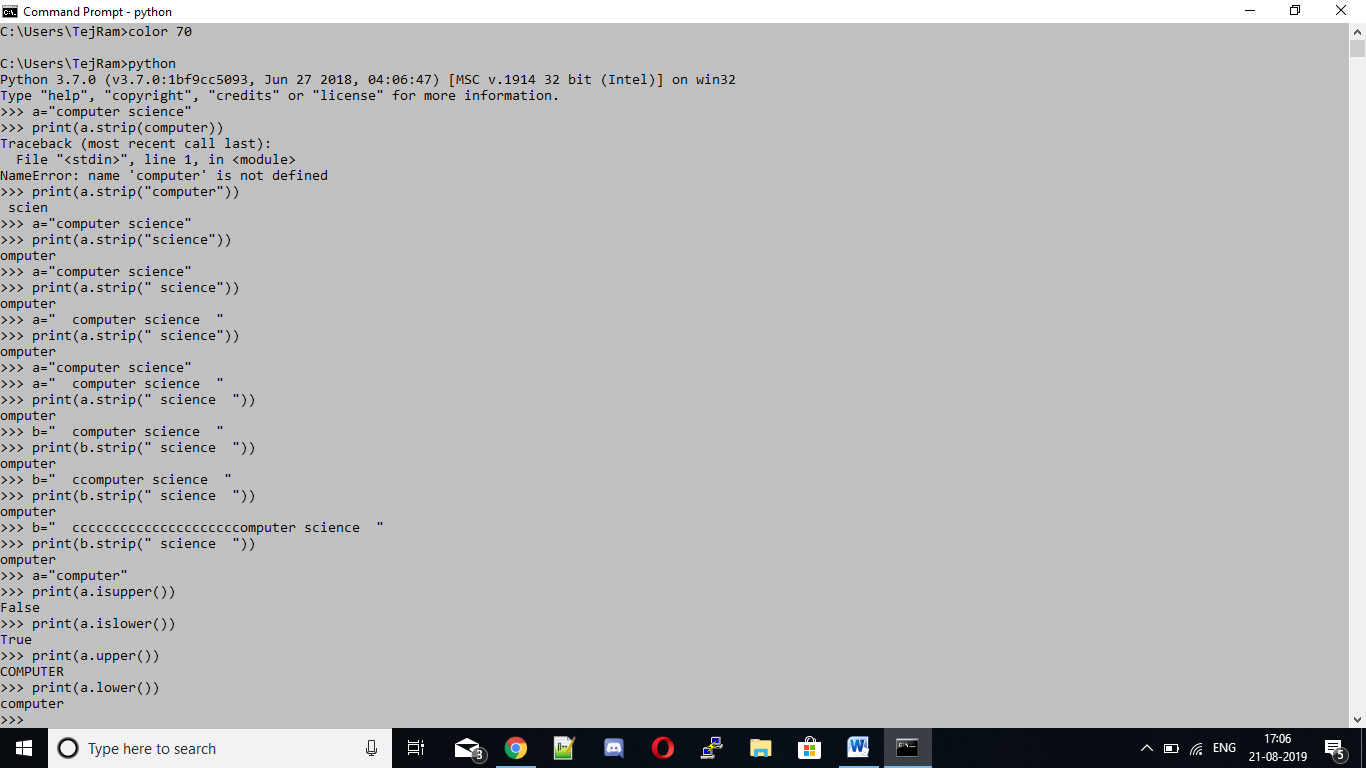
1.Variables and Strings



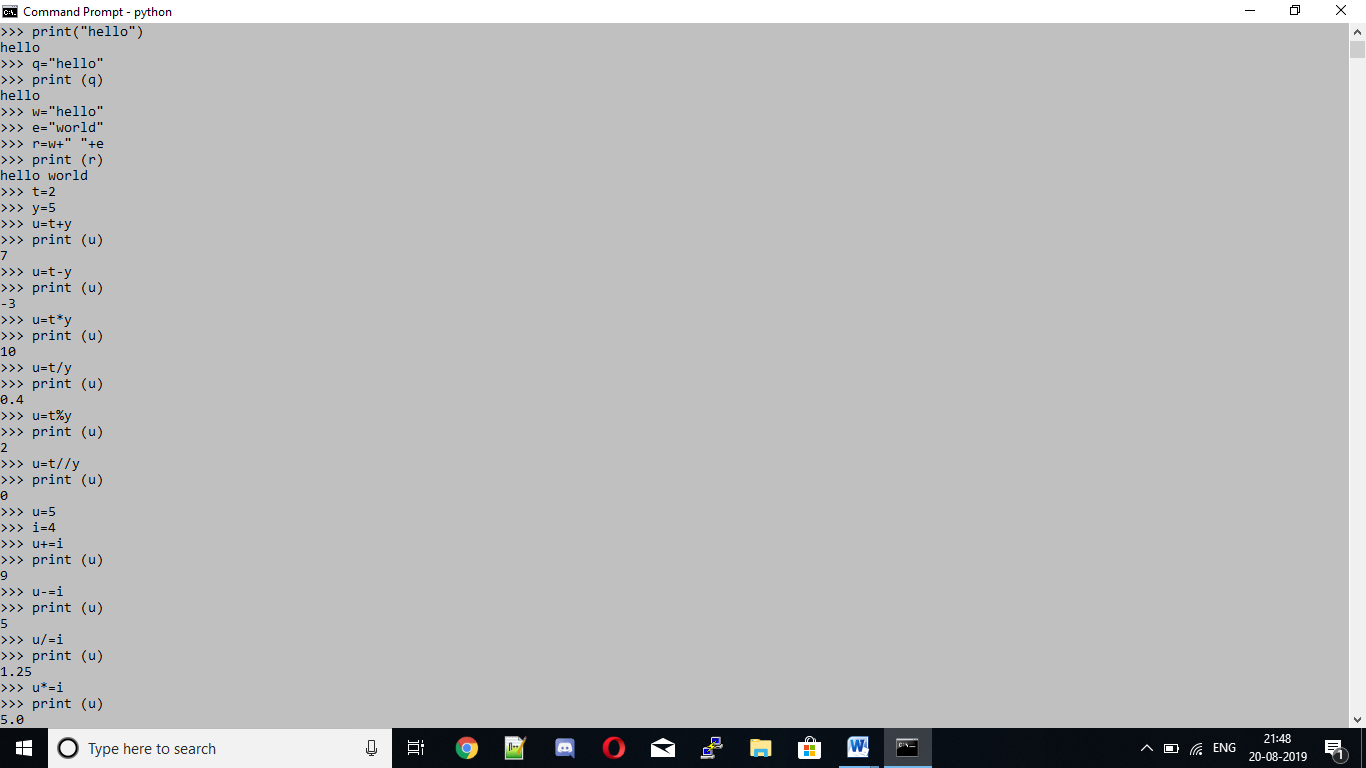


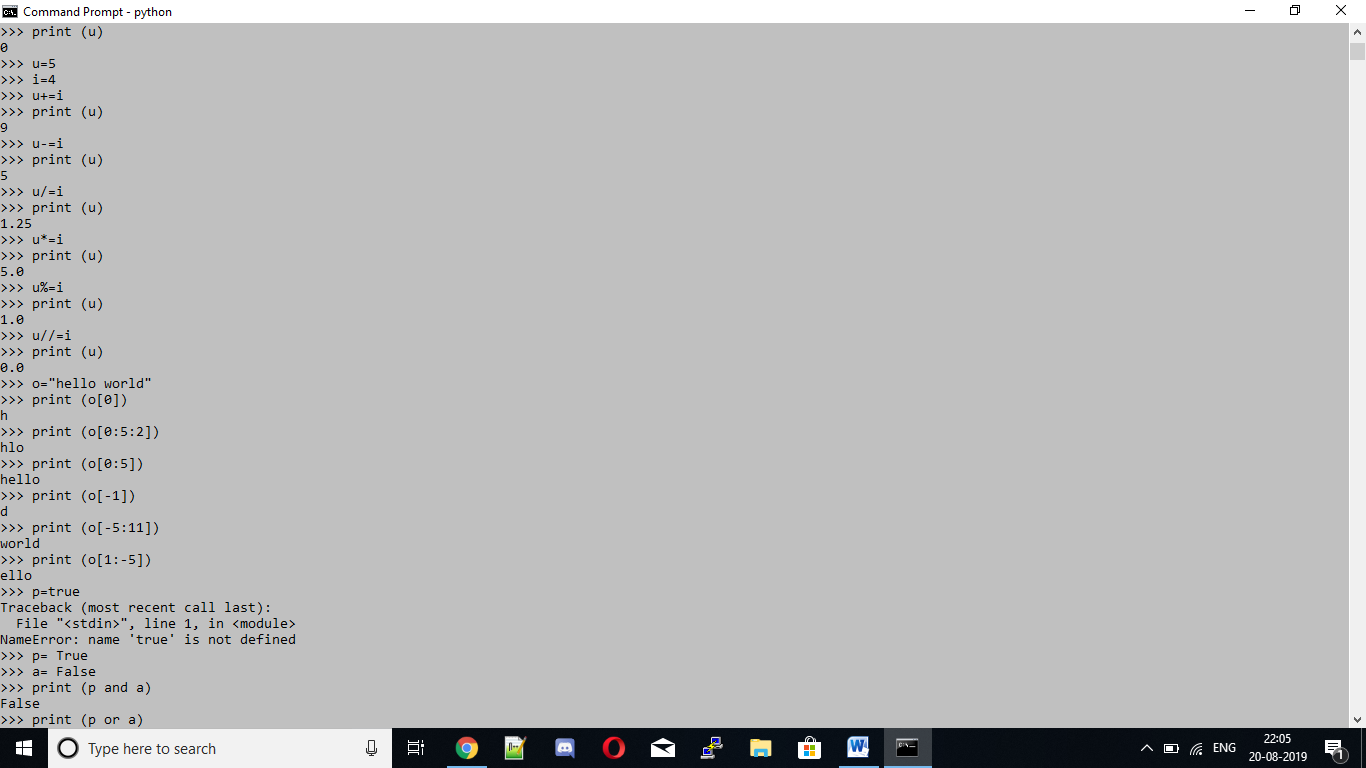




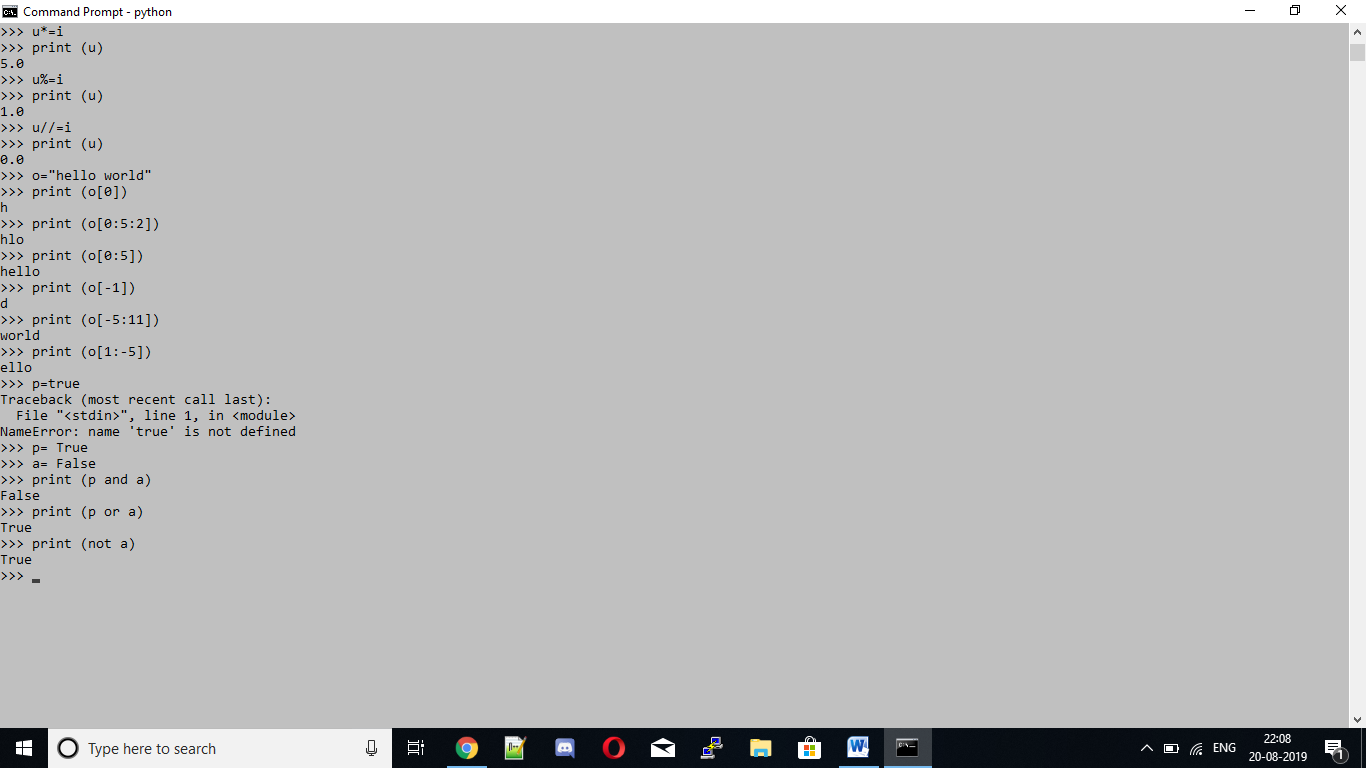


Arithmetic operators: Arithmetic operators are used to perform mathematical operations like addition, subtraction, multiplication and division.

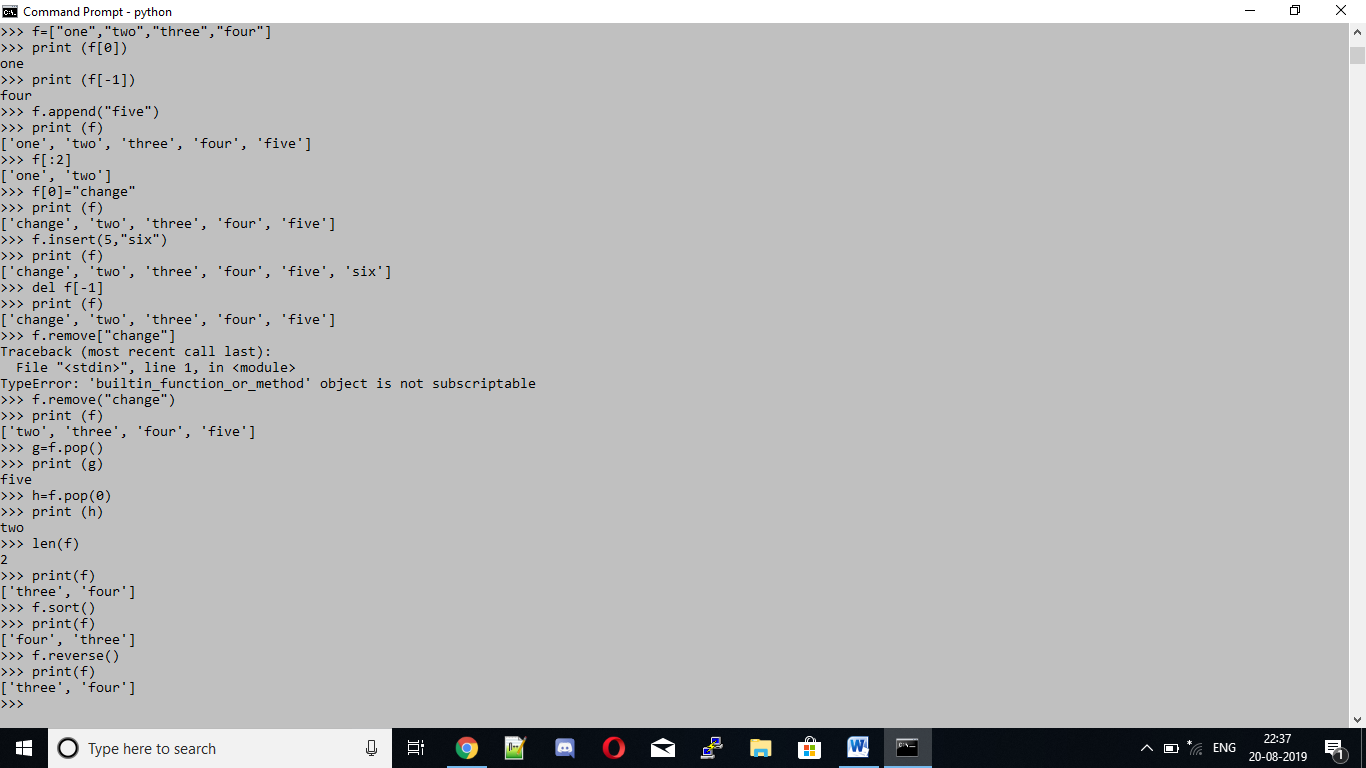




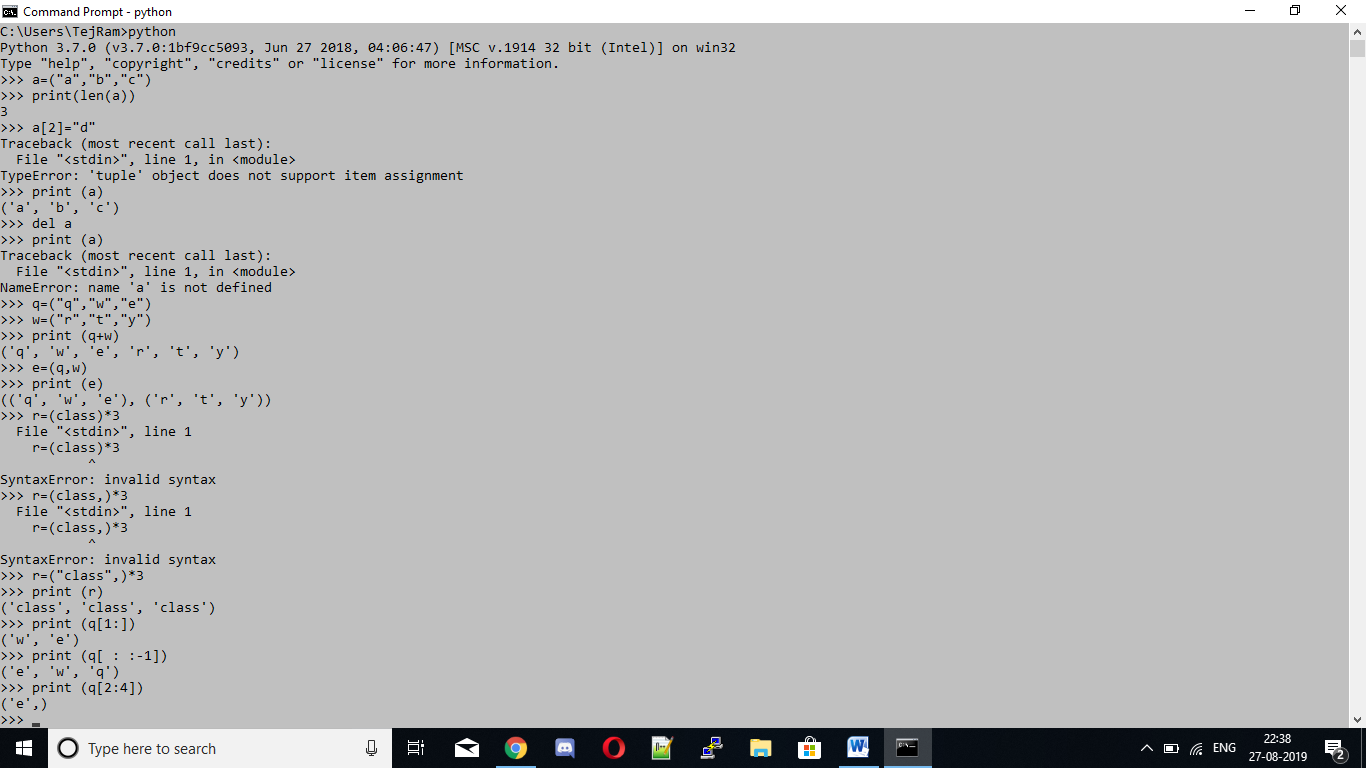
Logical operators: Logical operators perform Logical AND, Logical OR and Logical NOT operations.

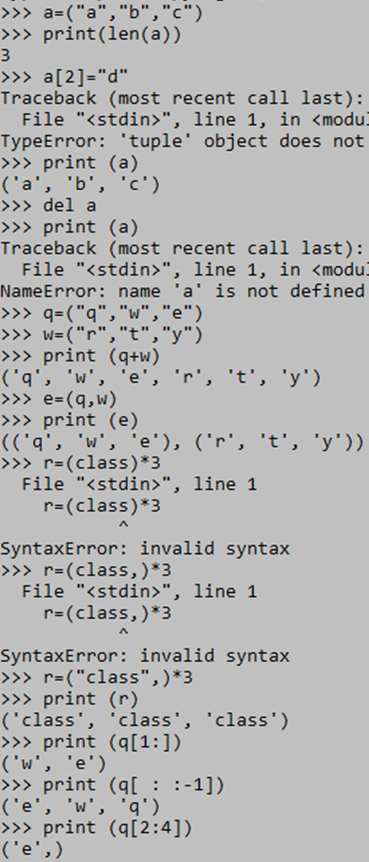


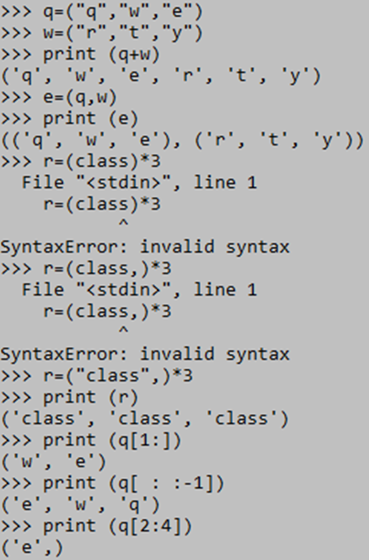
2. Lists



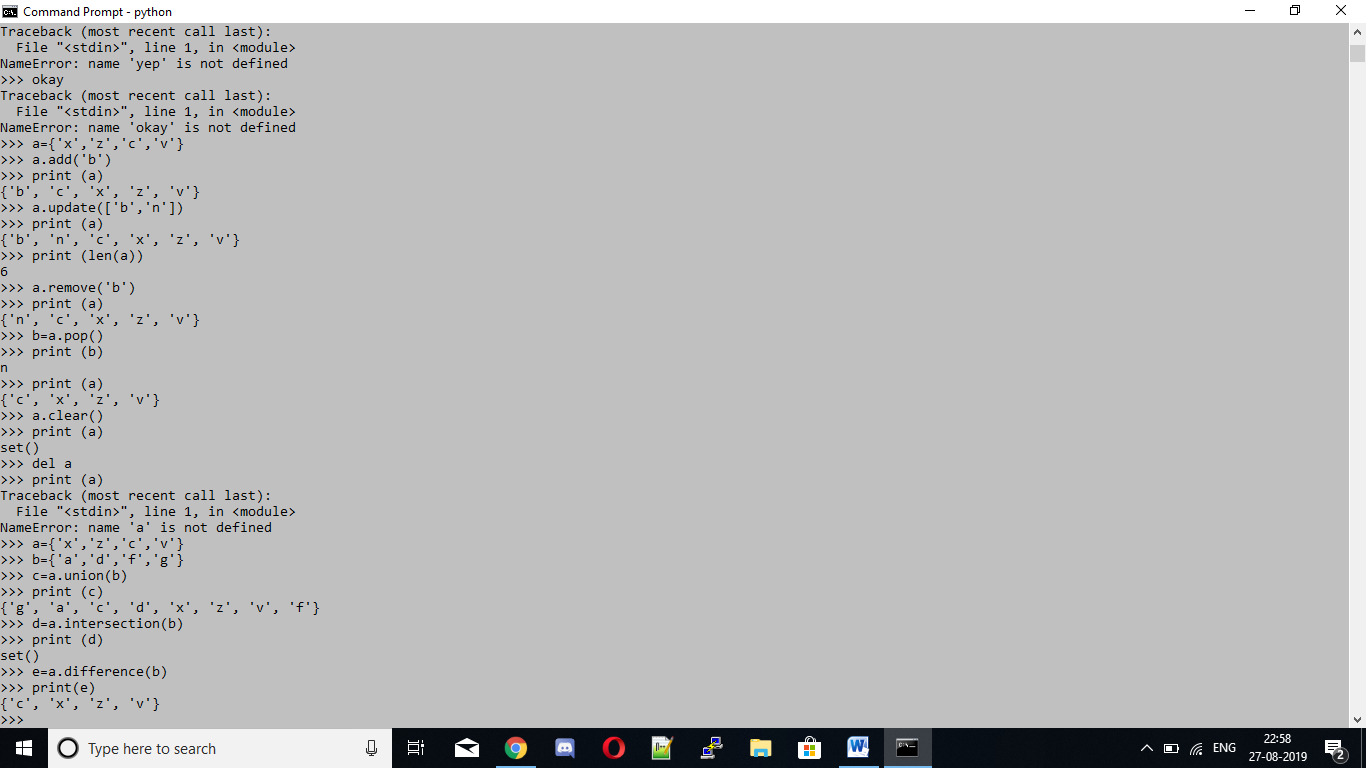
3. Tuples

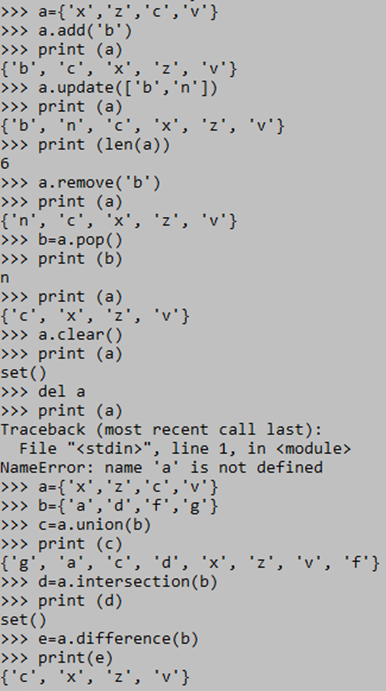






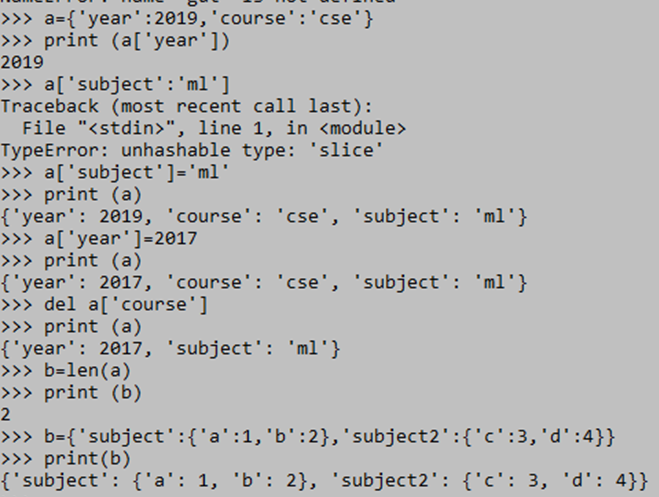
Sets:

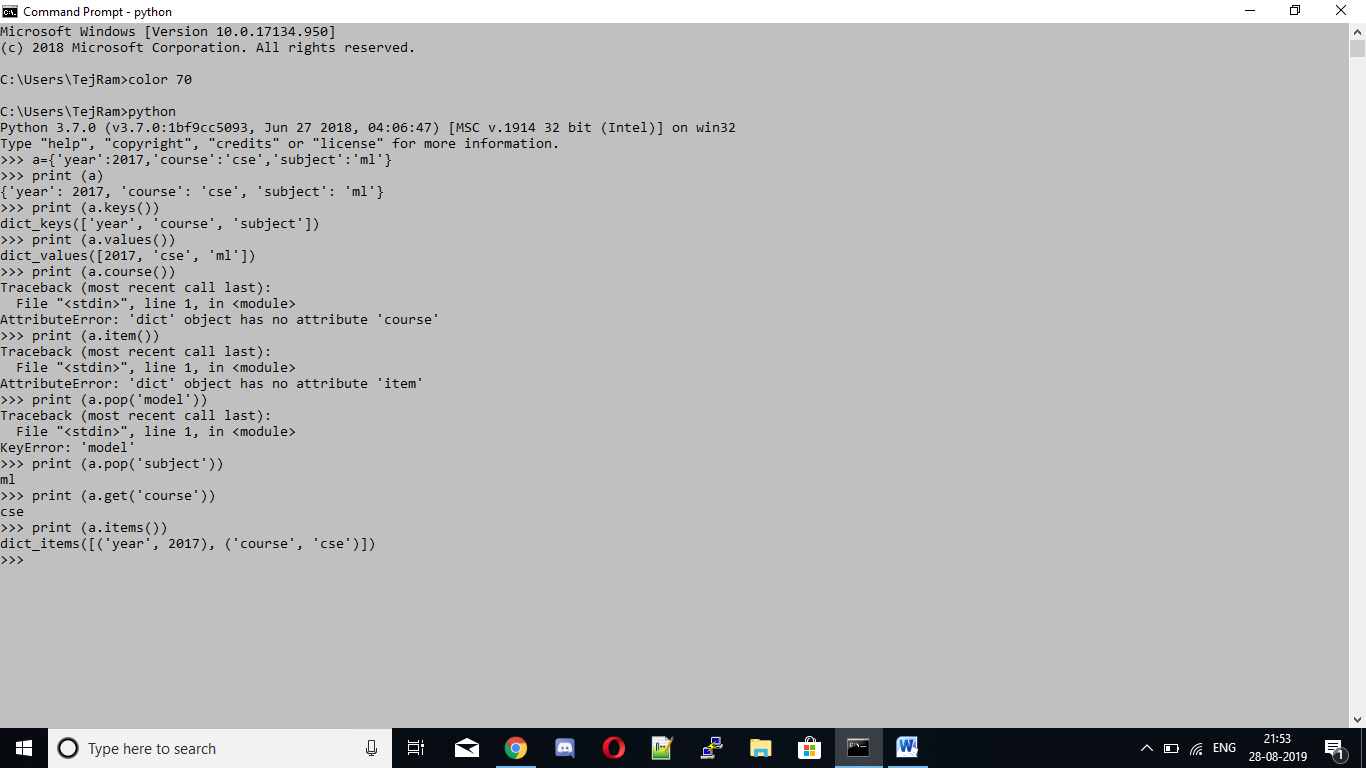


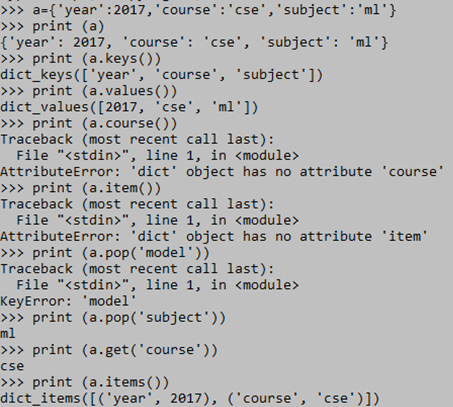


4. Dictionaries





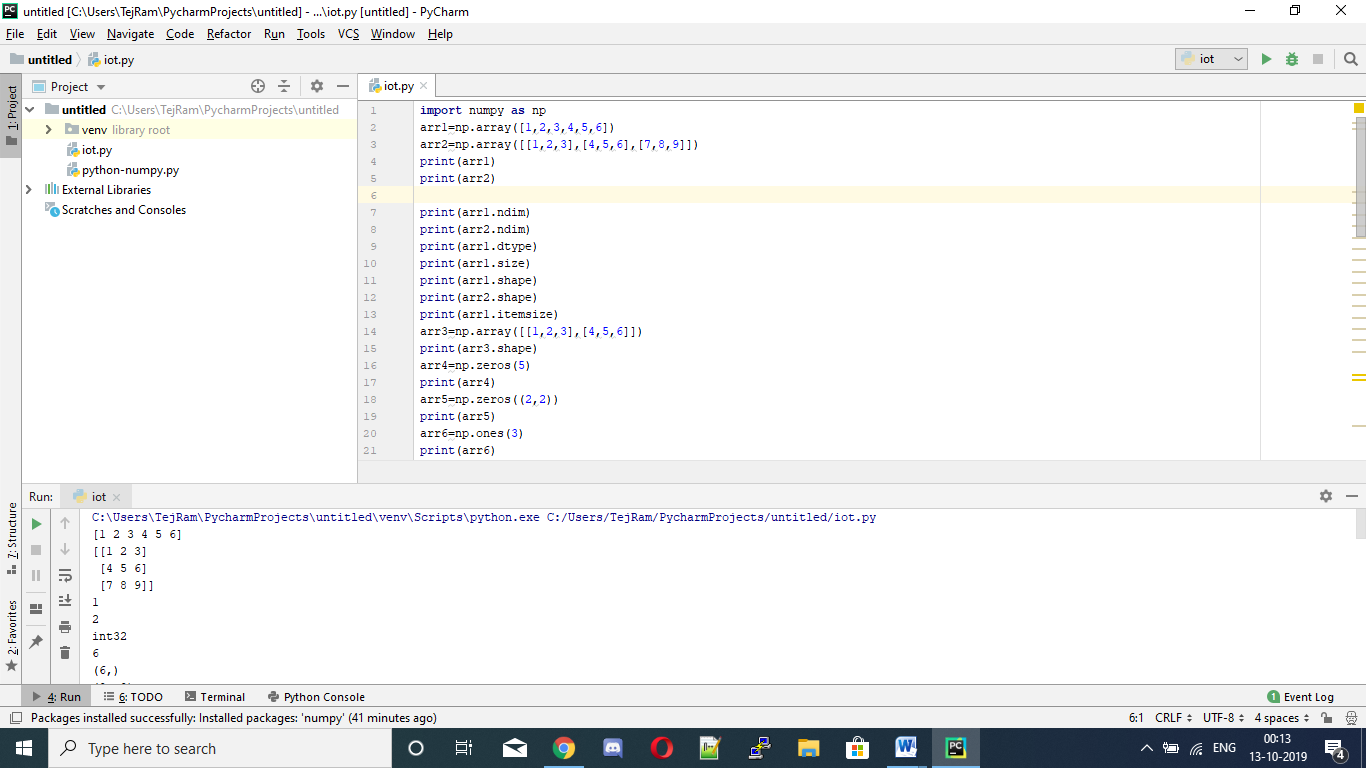




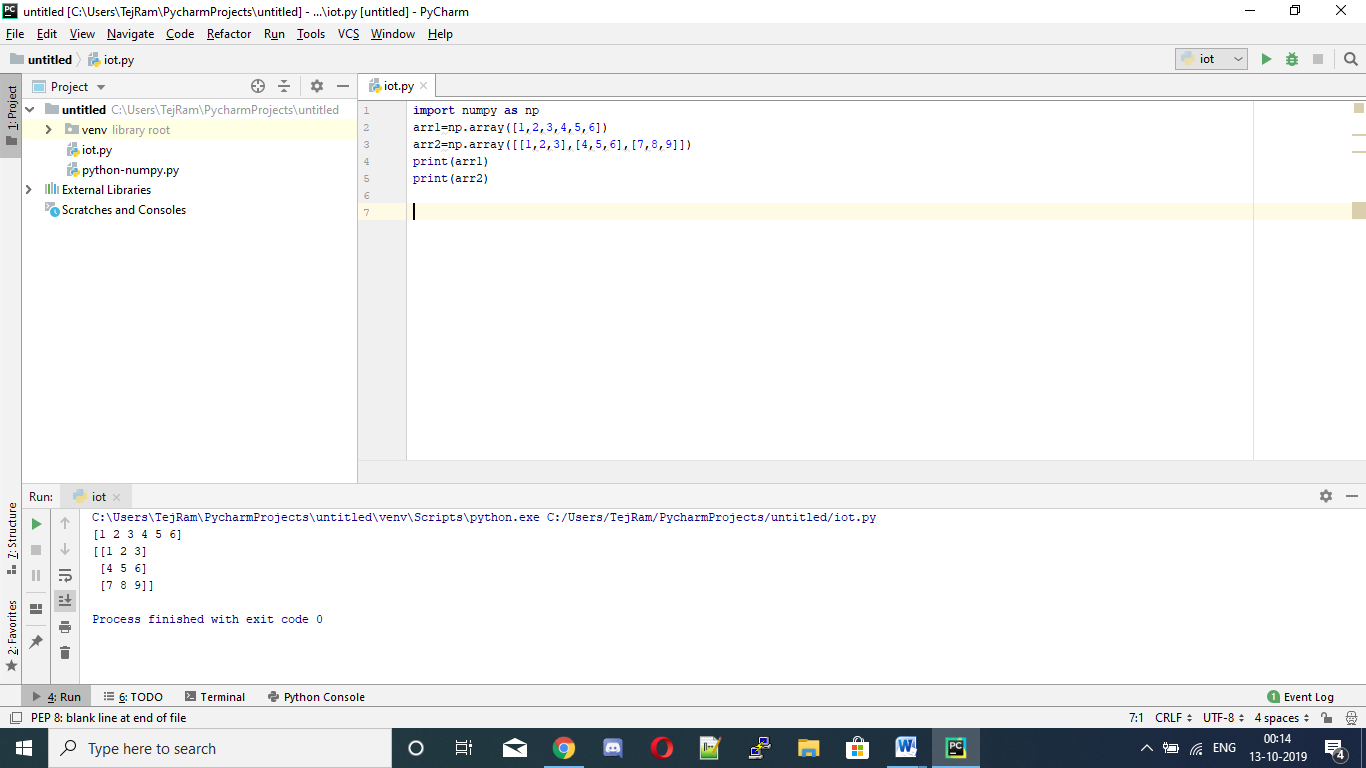
Program 2: Advanced Python.

1. Numpy

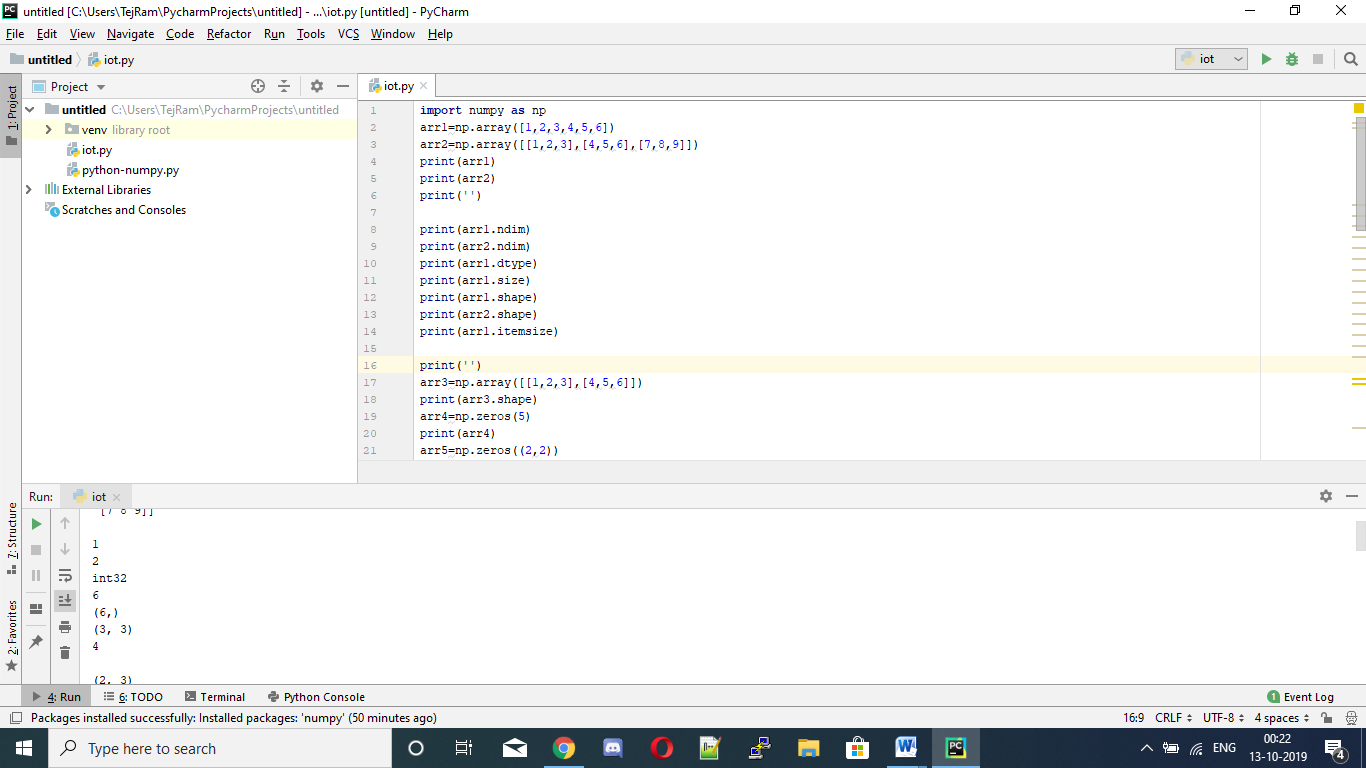
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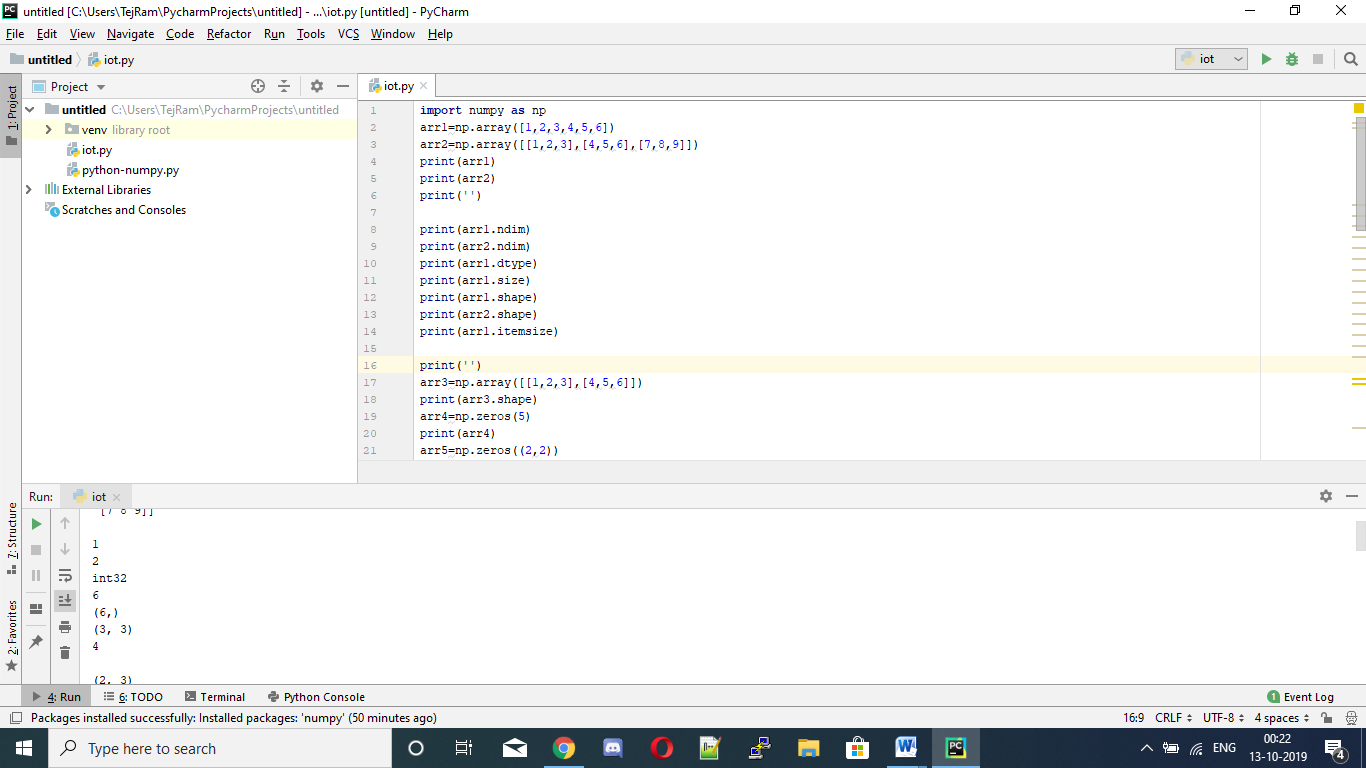
Output:-



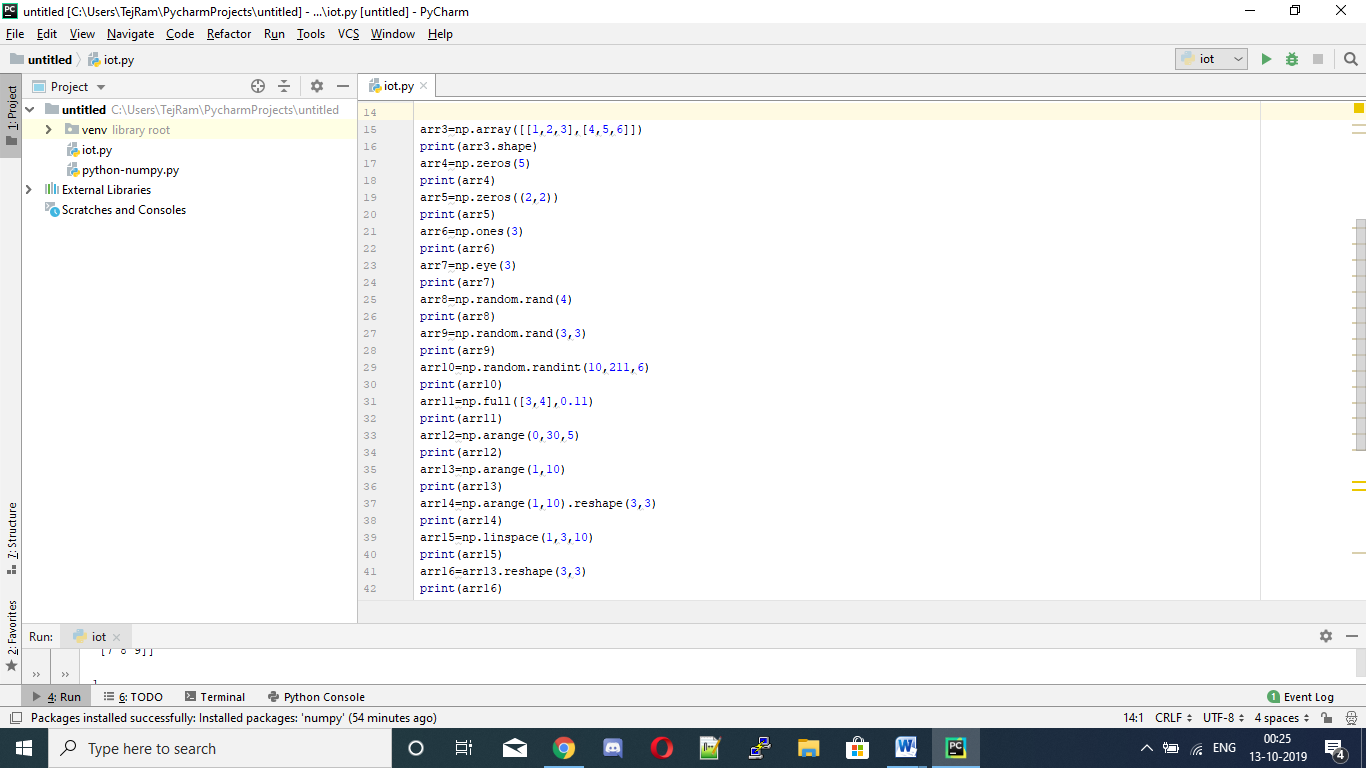
Input:-



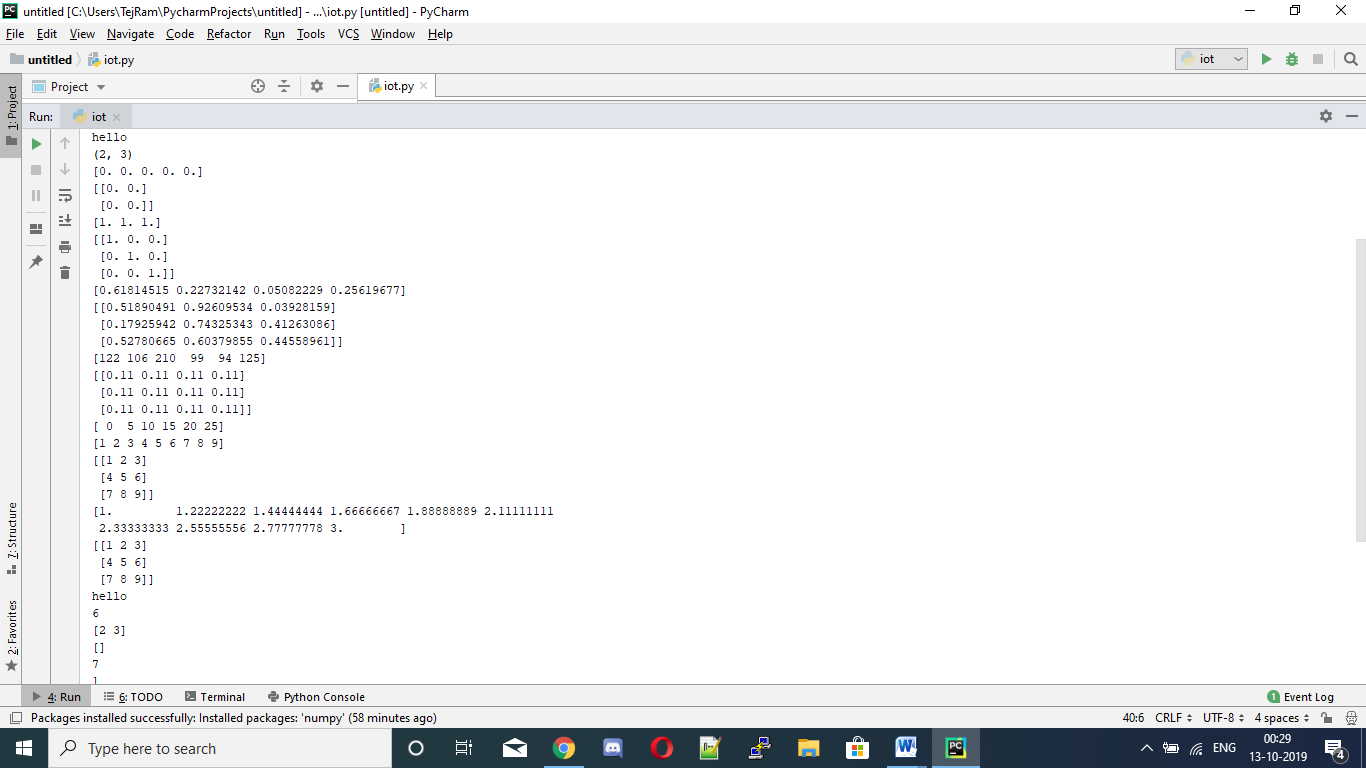
Output:-



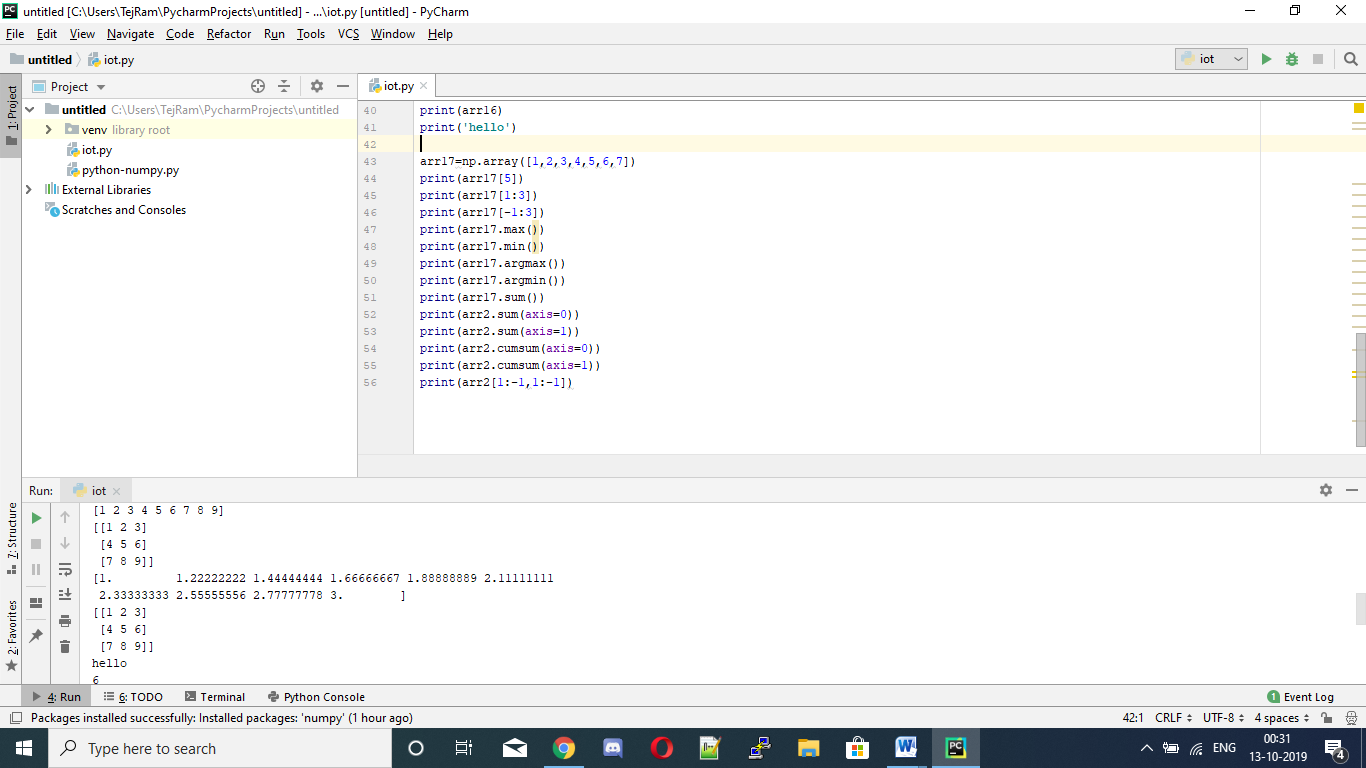
Input:-



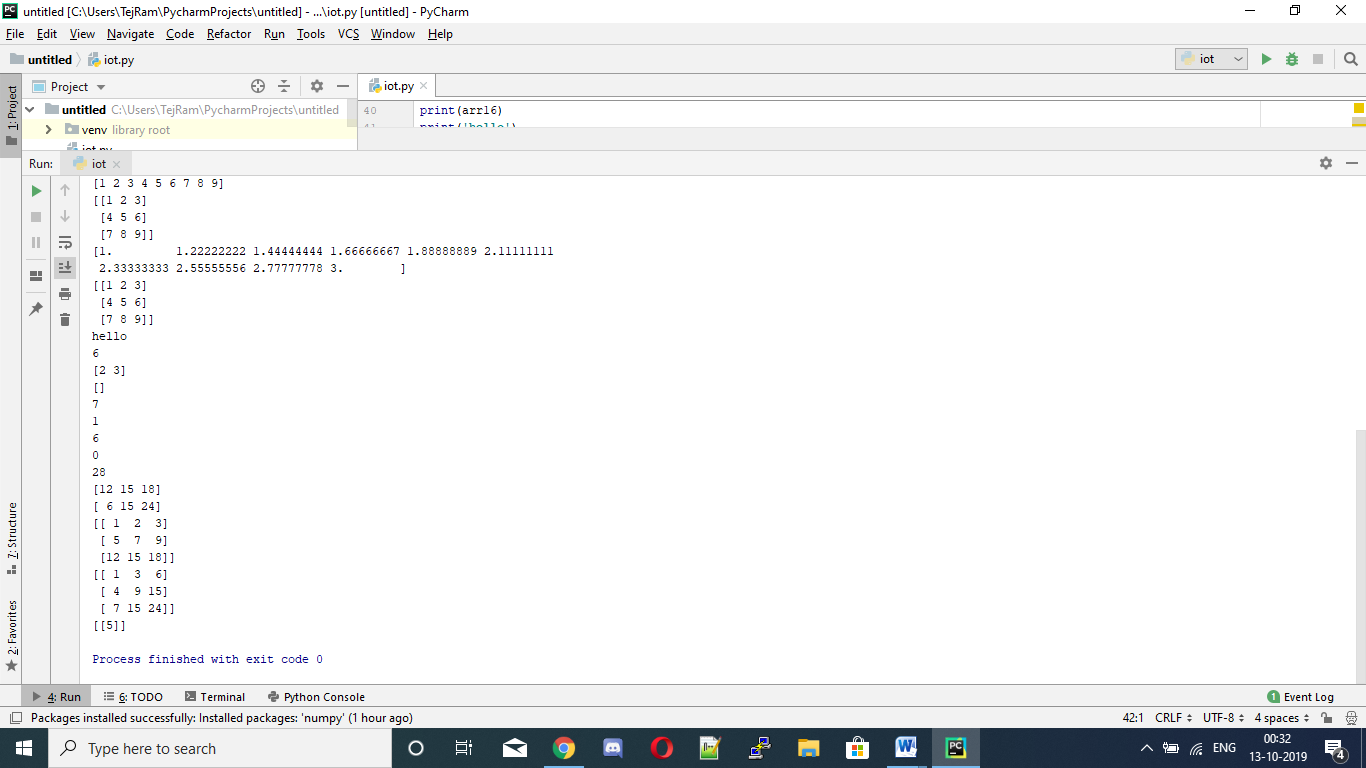
Output:-



Input:-

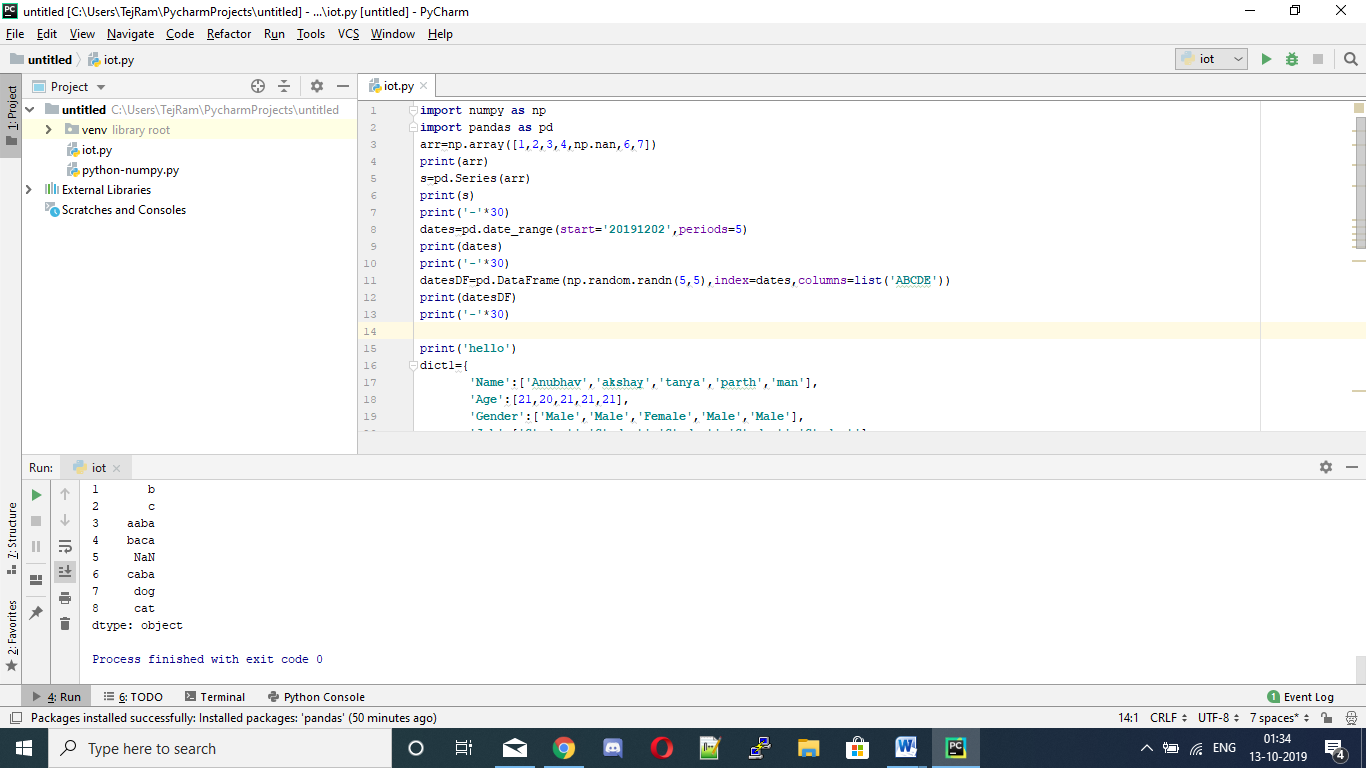


Output:-

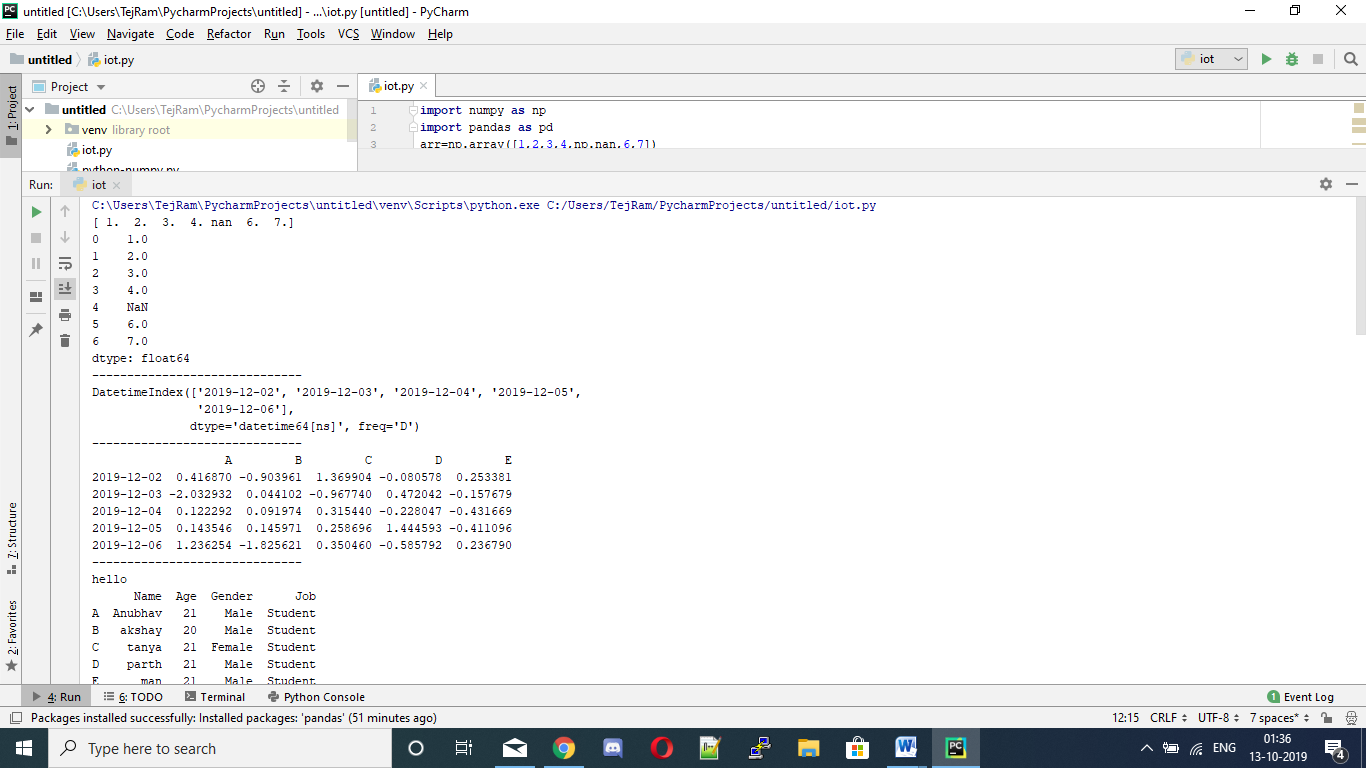


2. Pandas

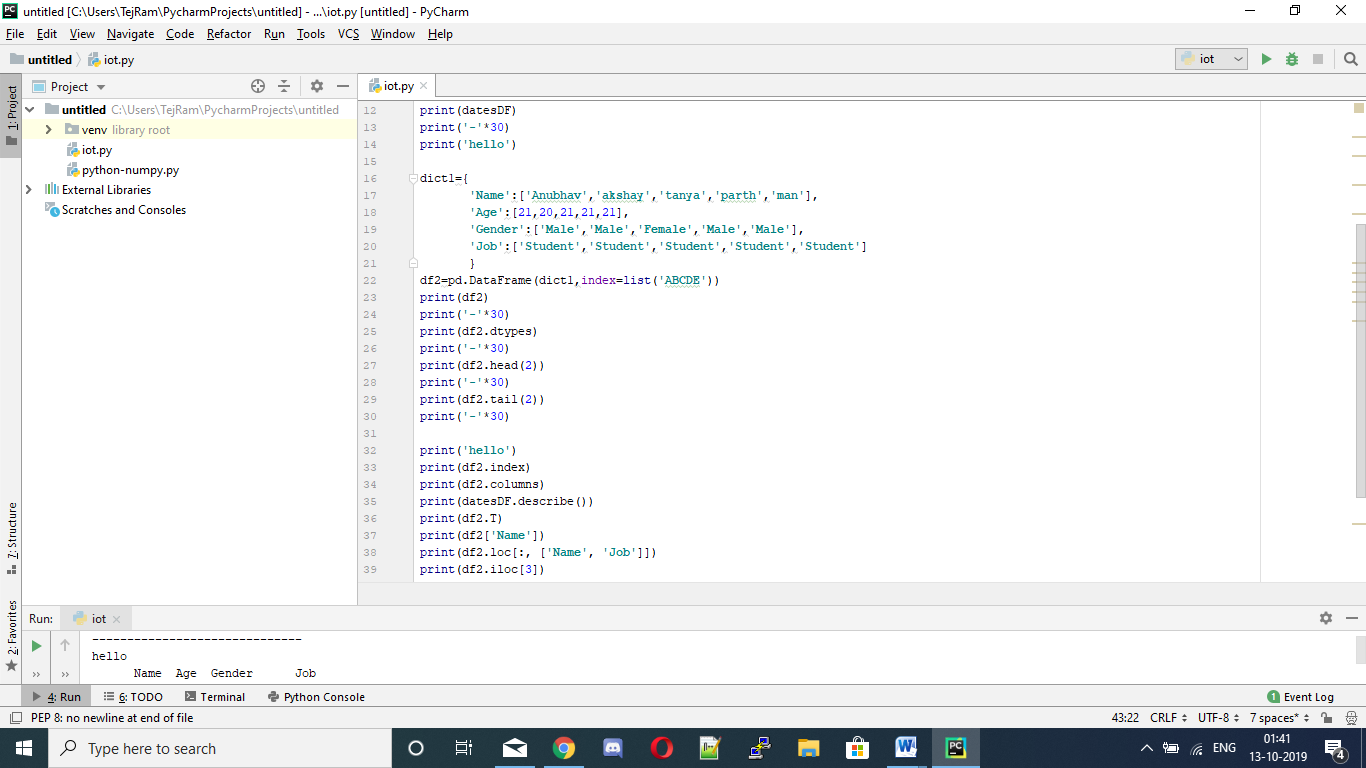
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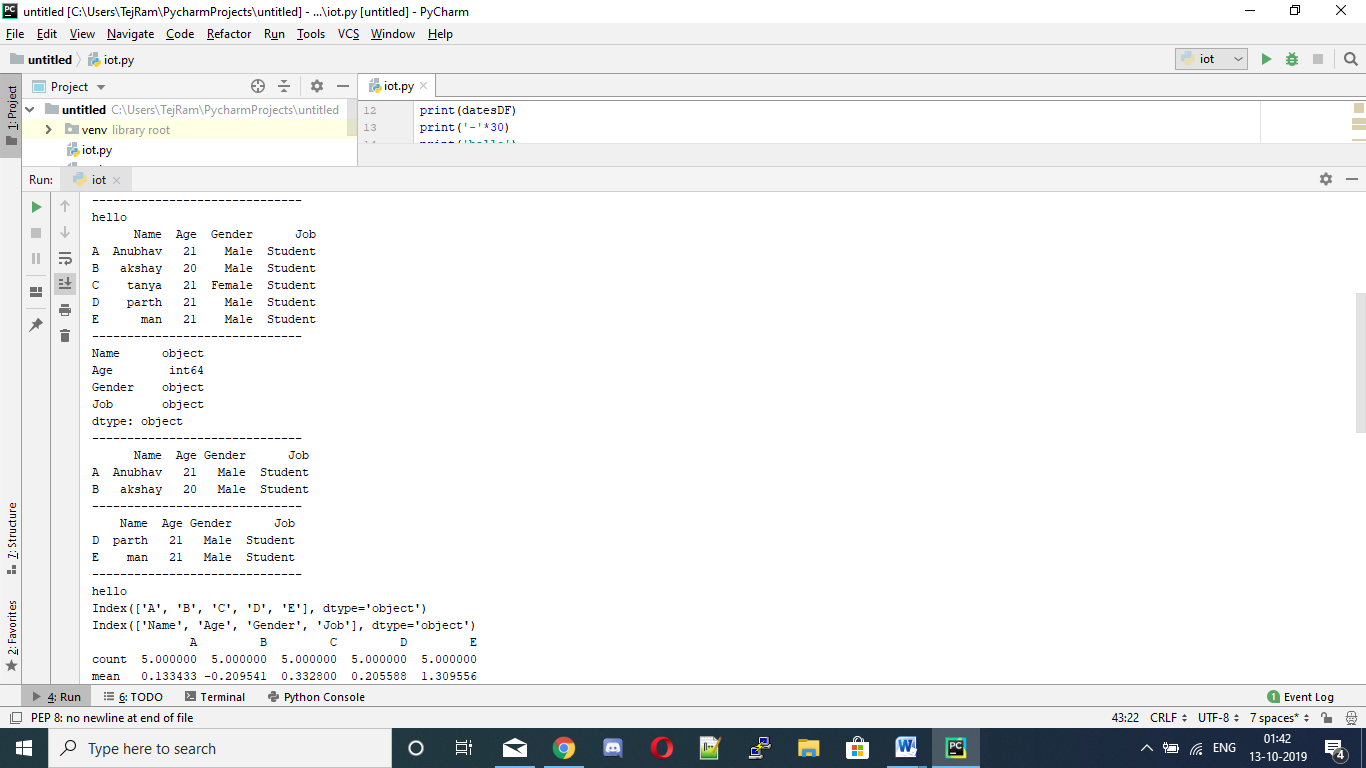
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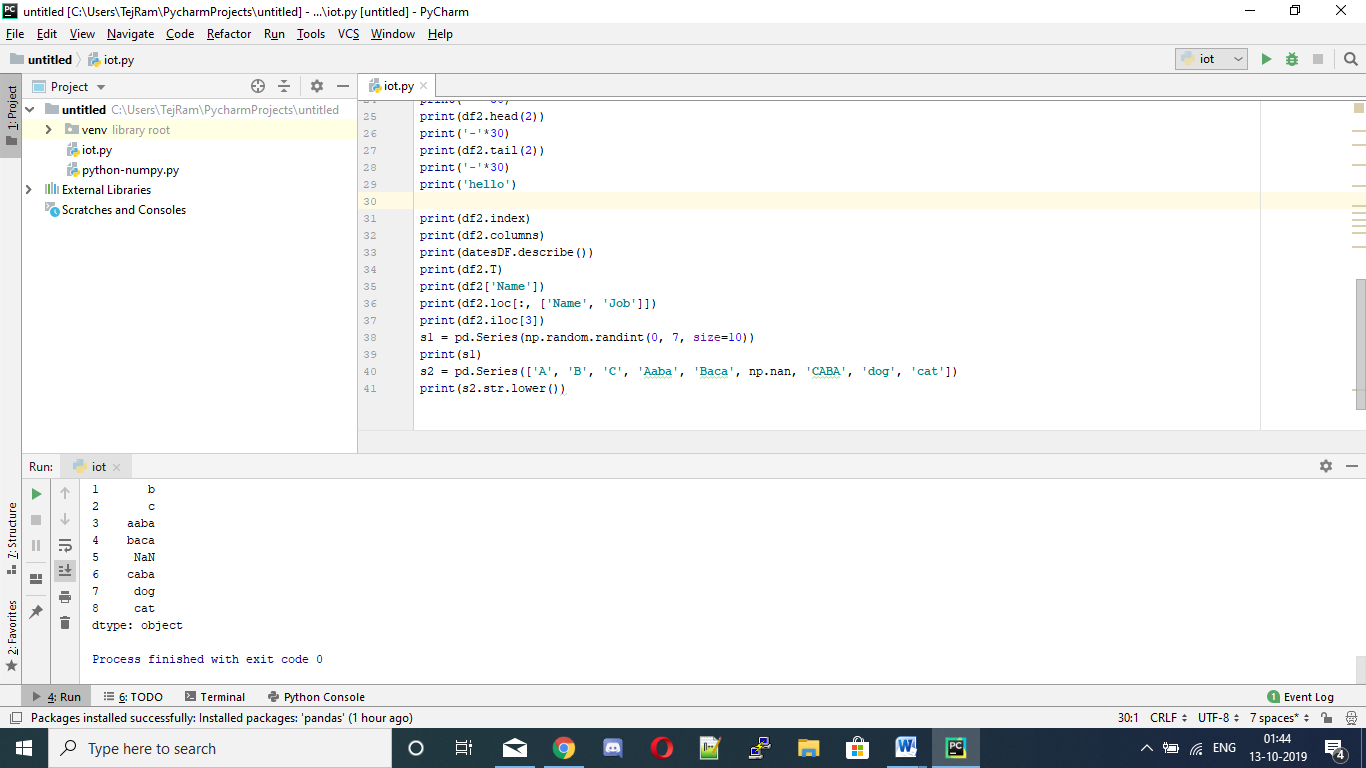
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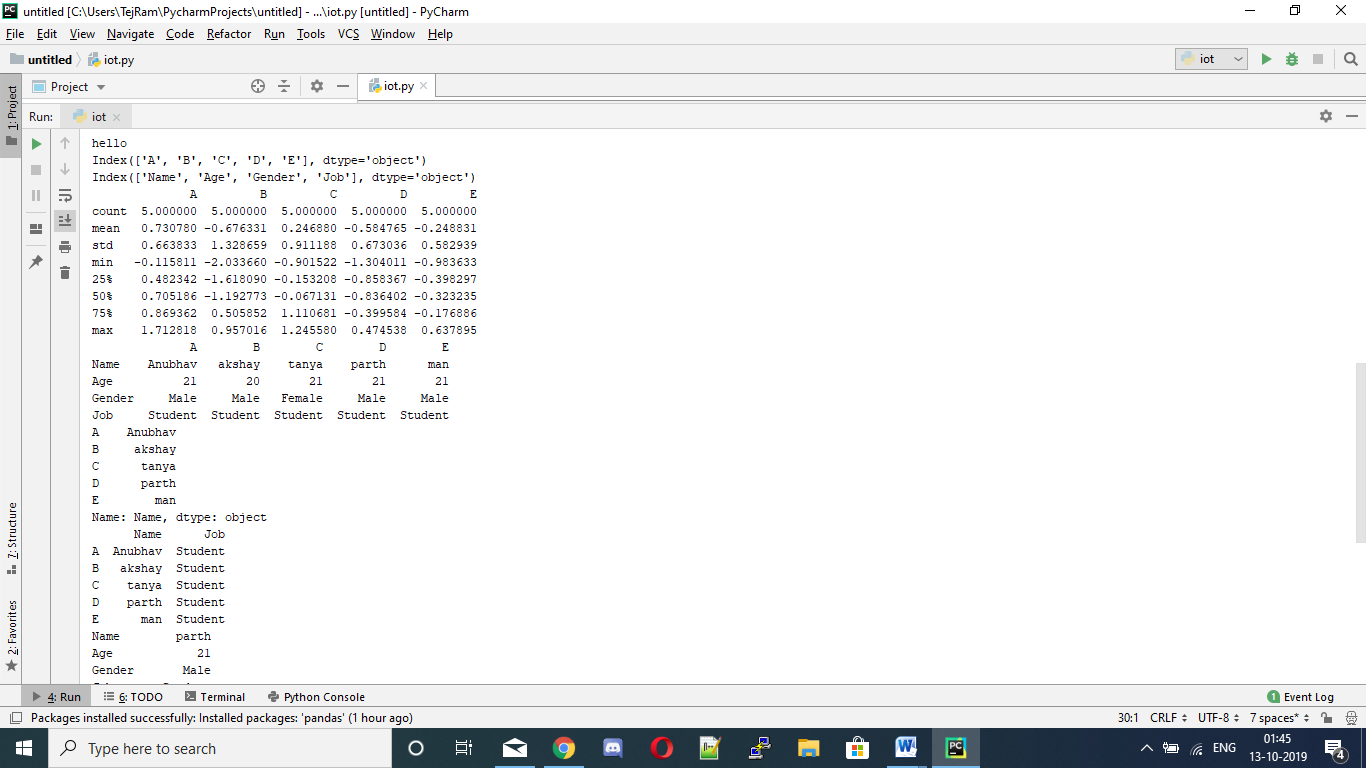
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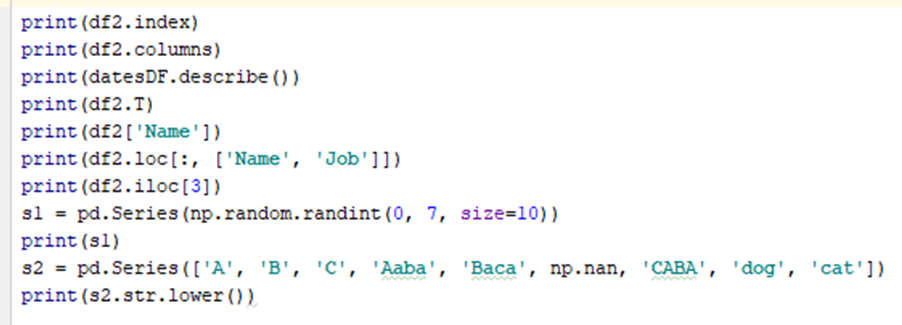
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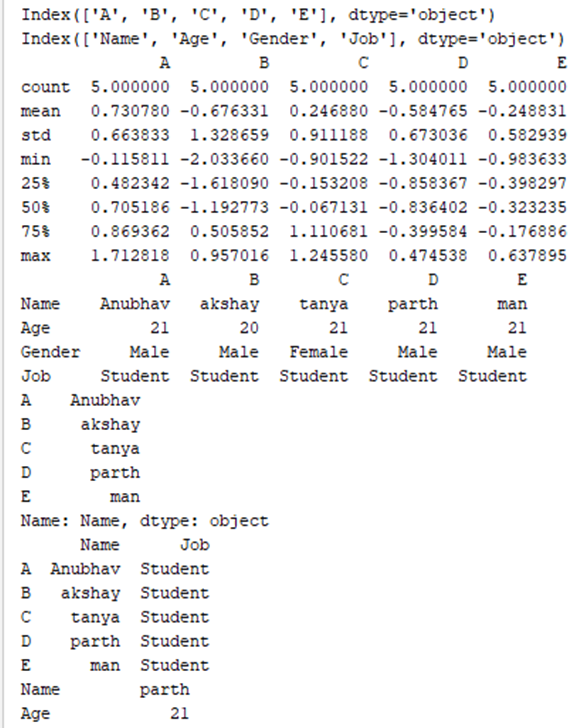
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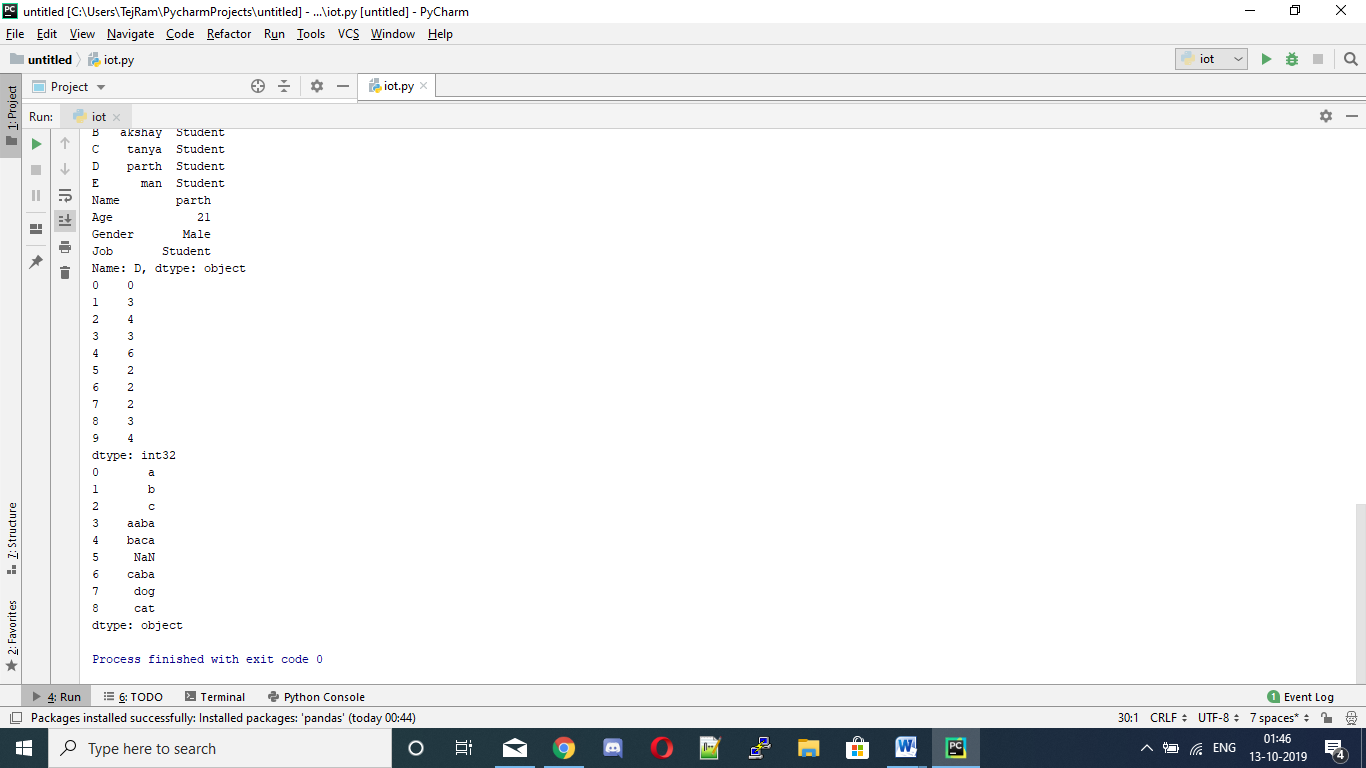


Input:-



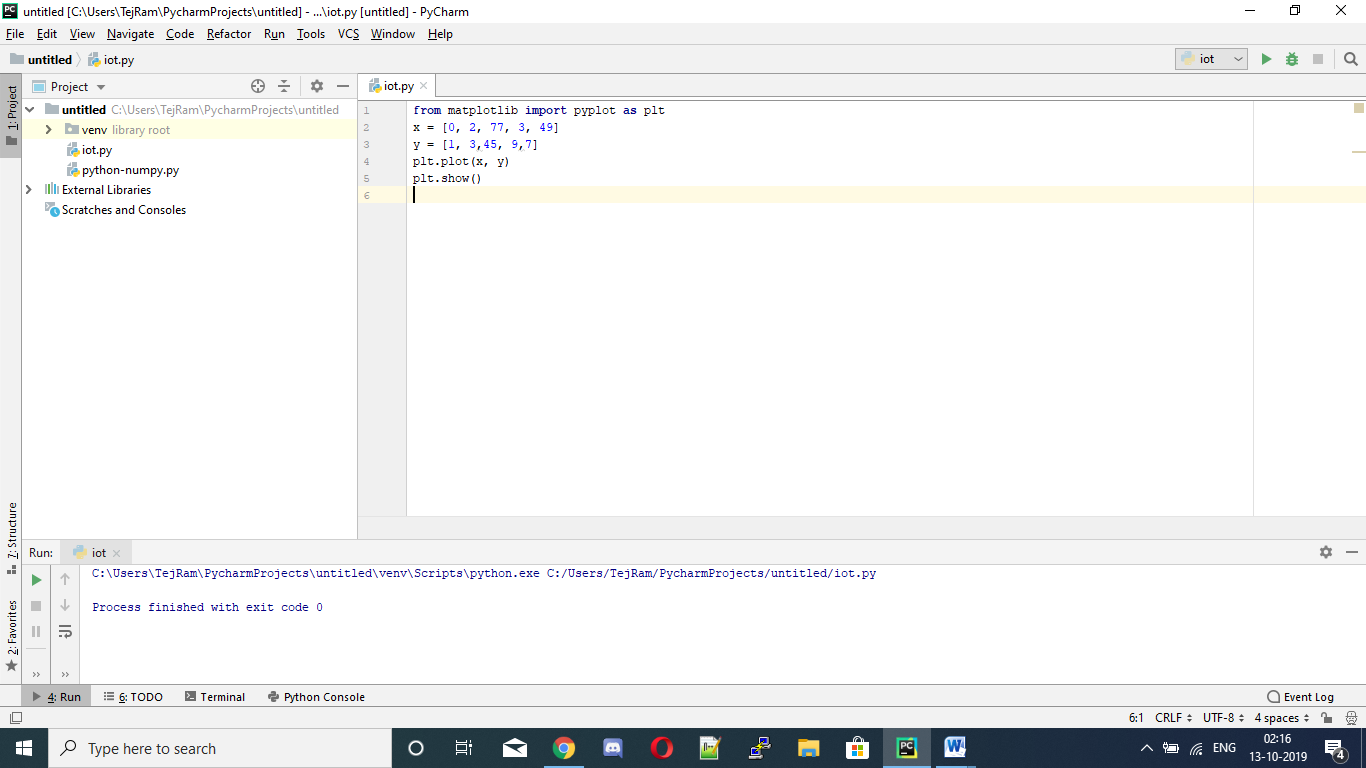
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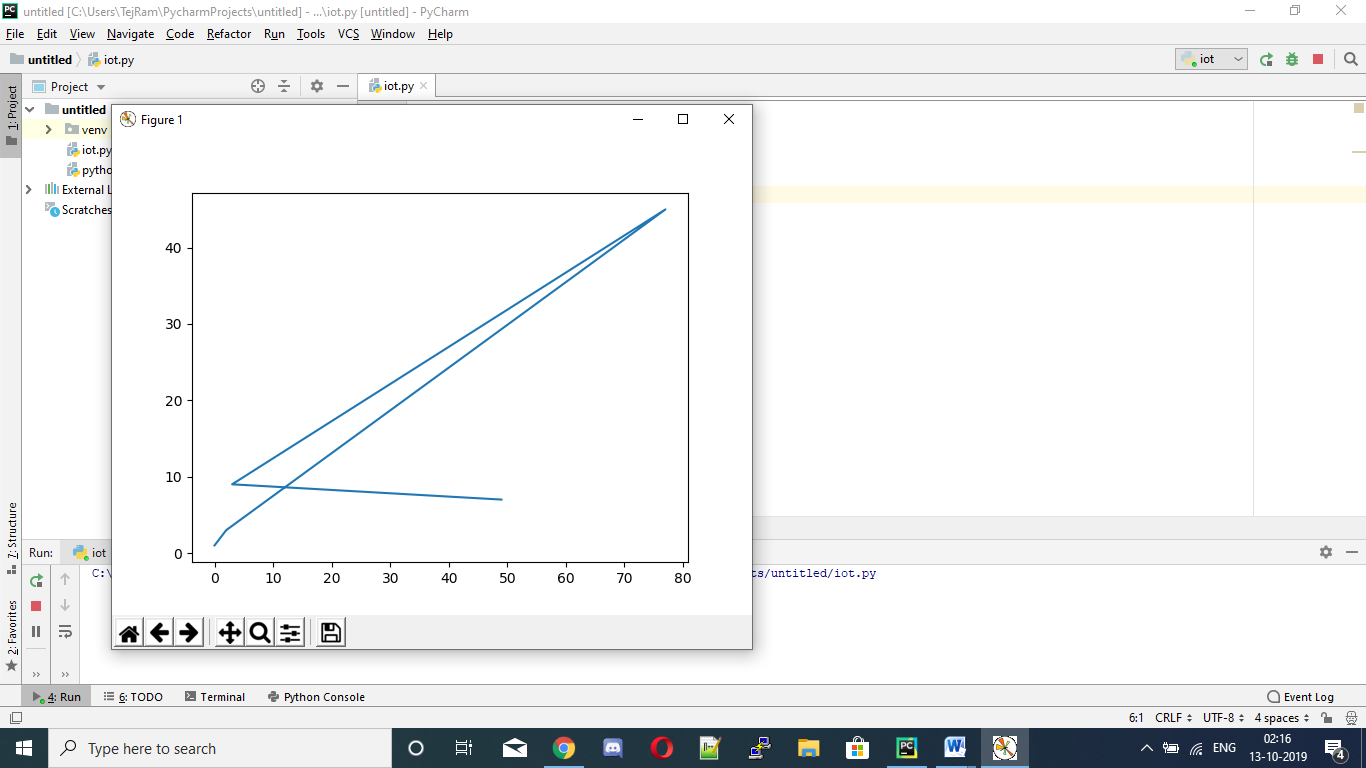




Program 3: Matplotlib.

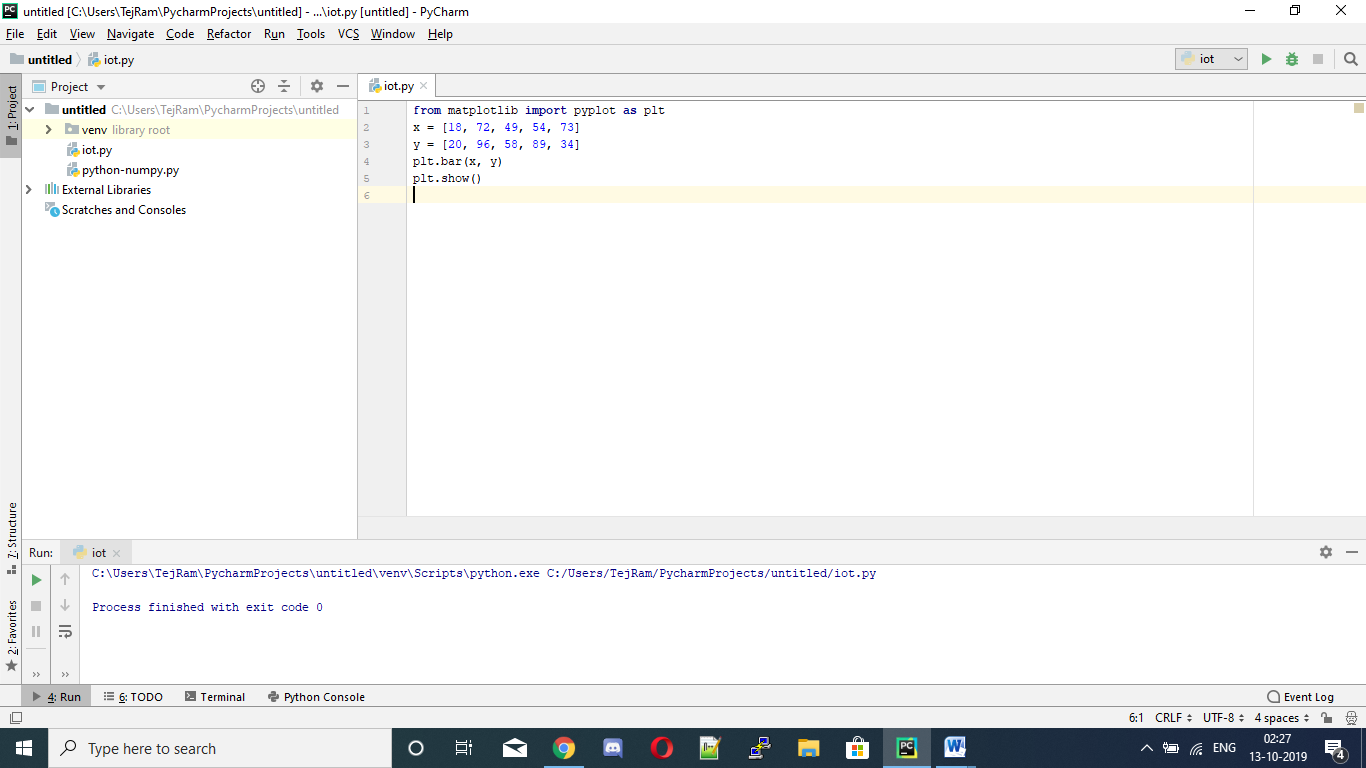
1. Line Plot

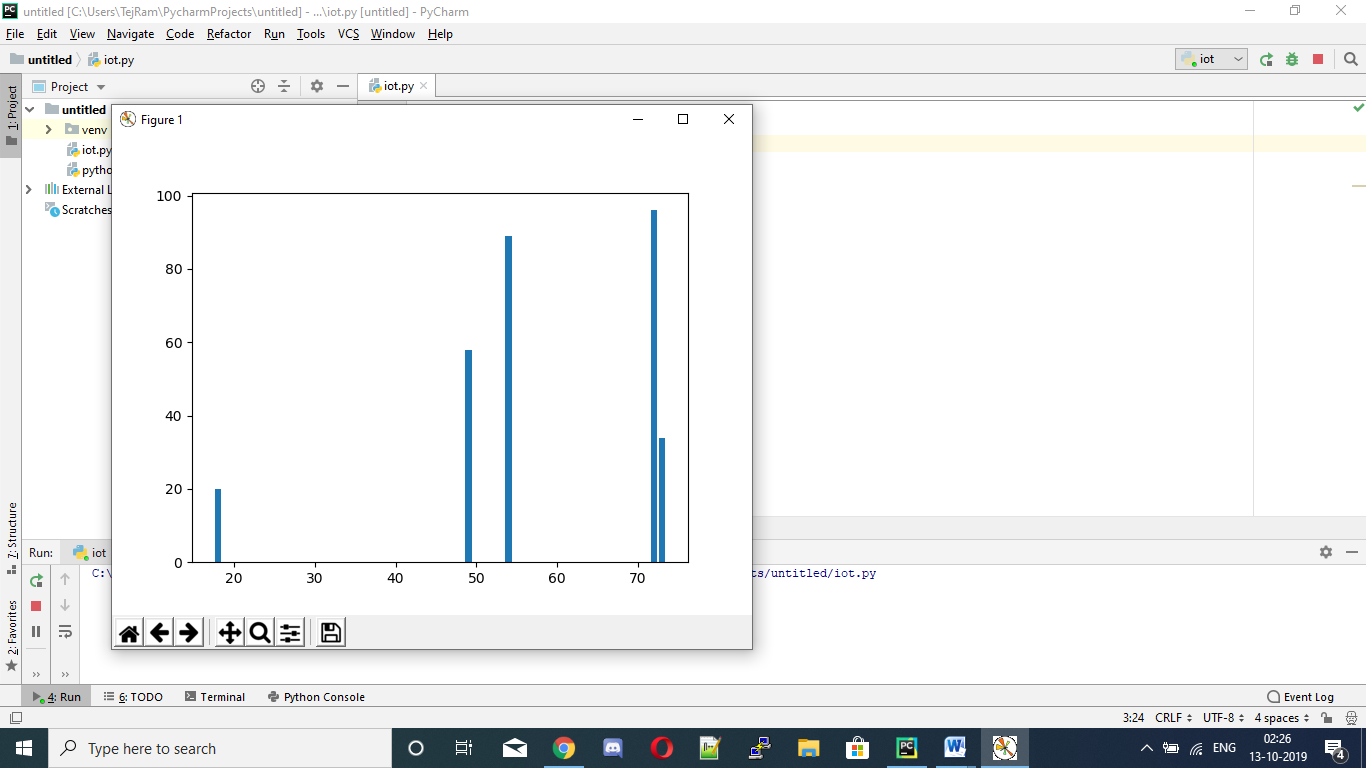




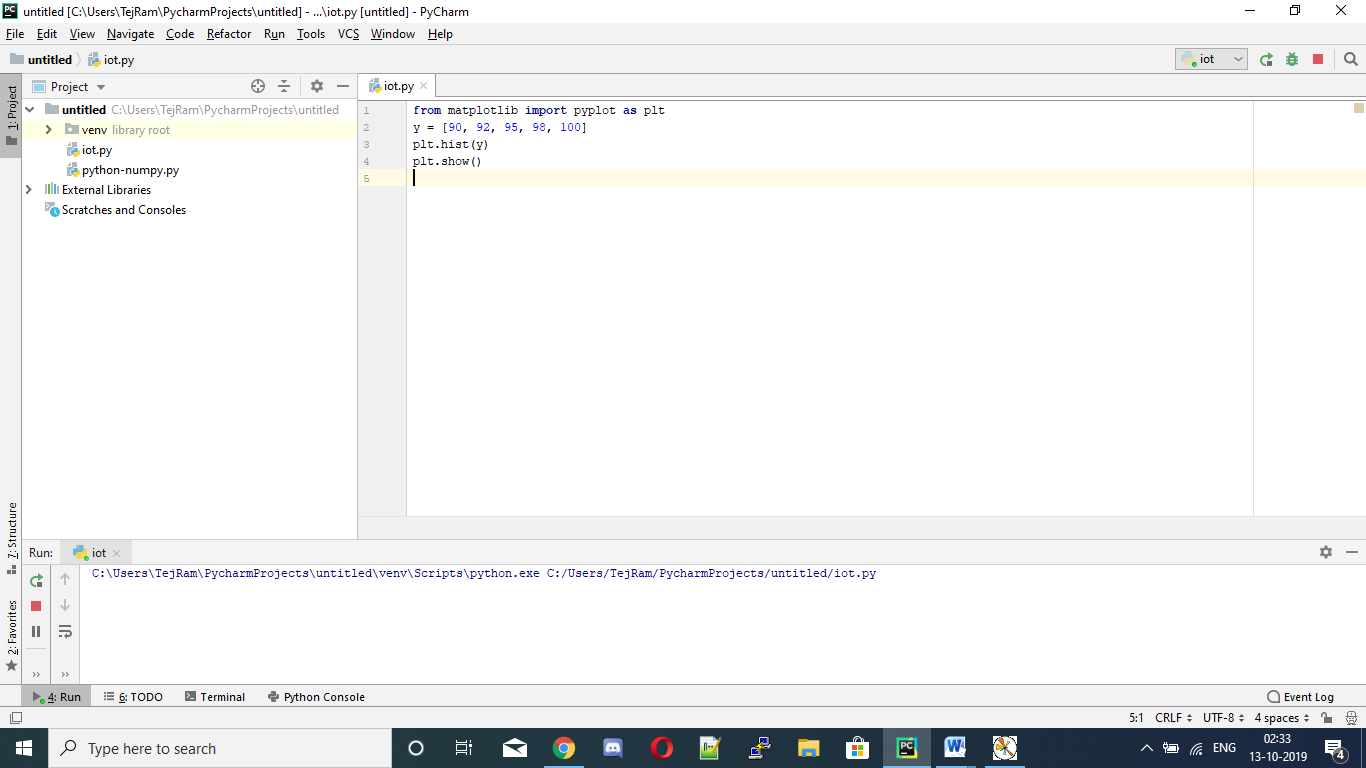
2. Bar Plot

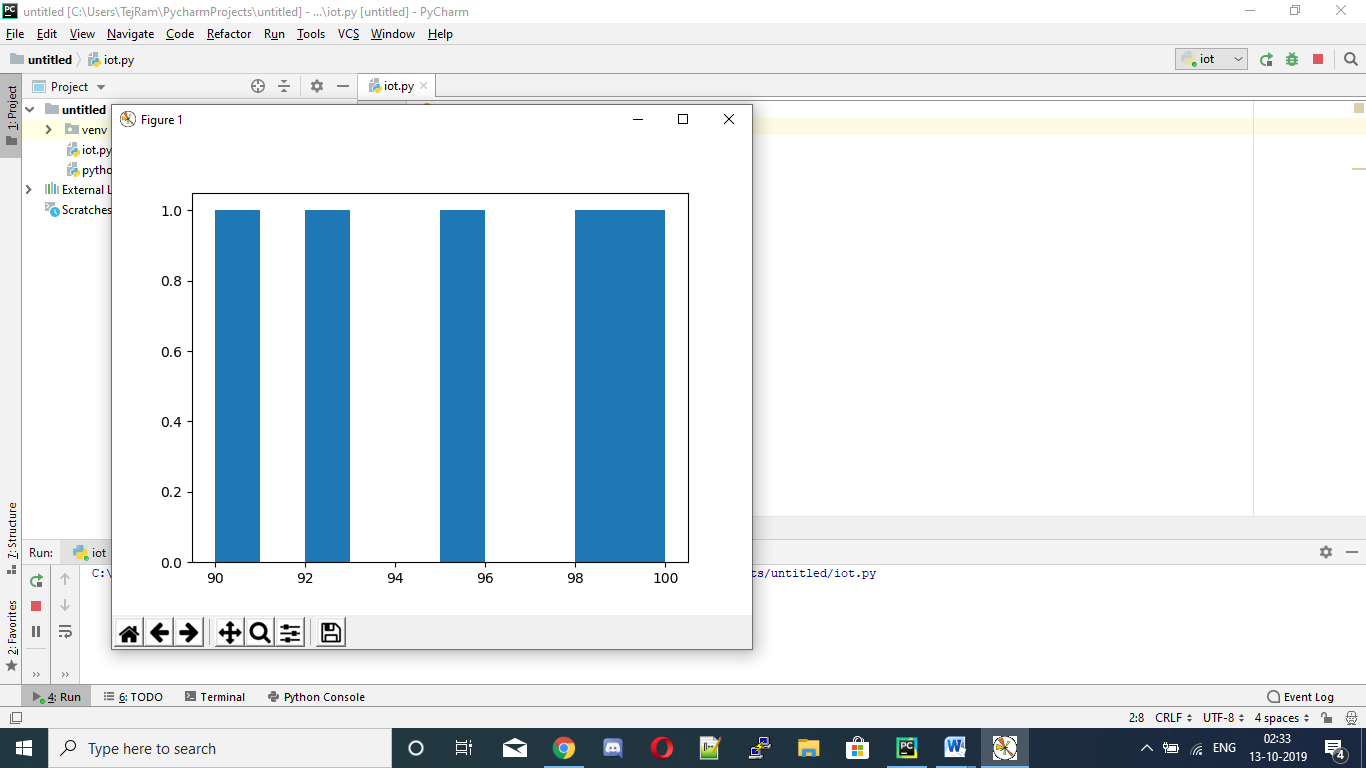
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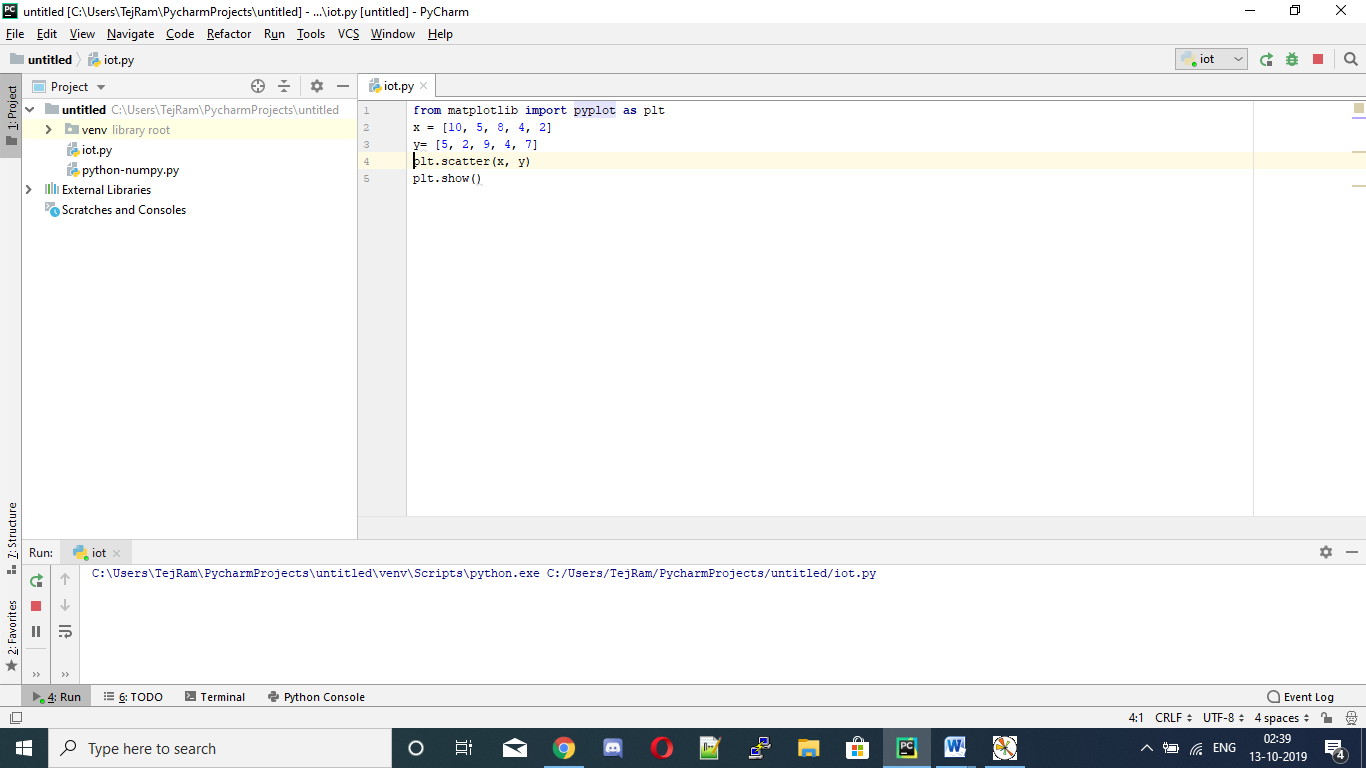


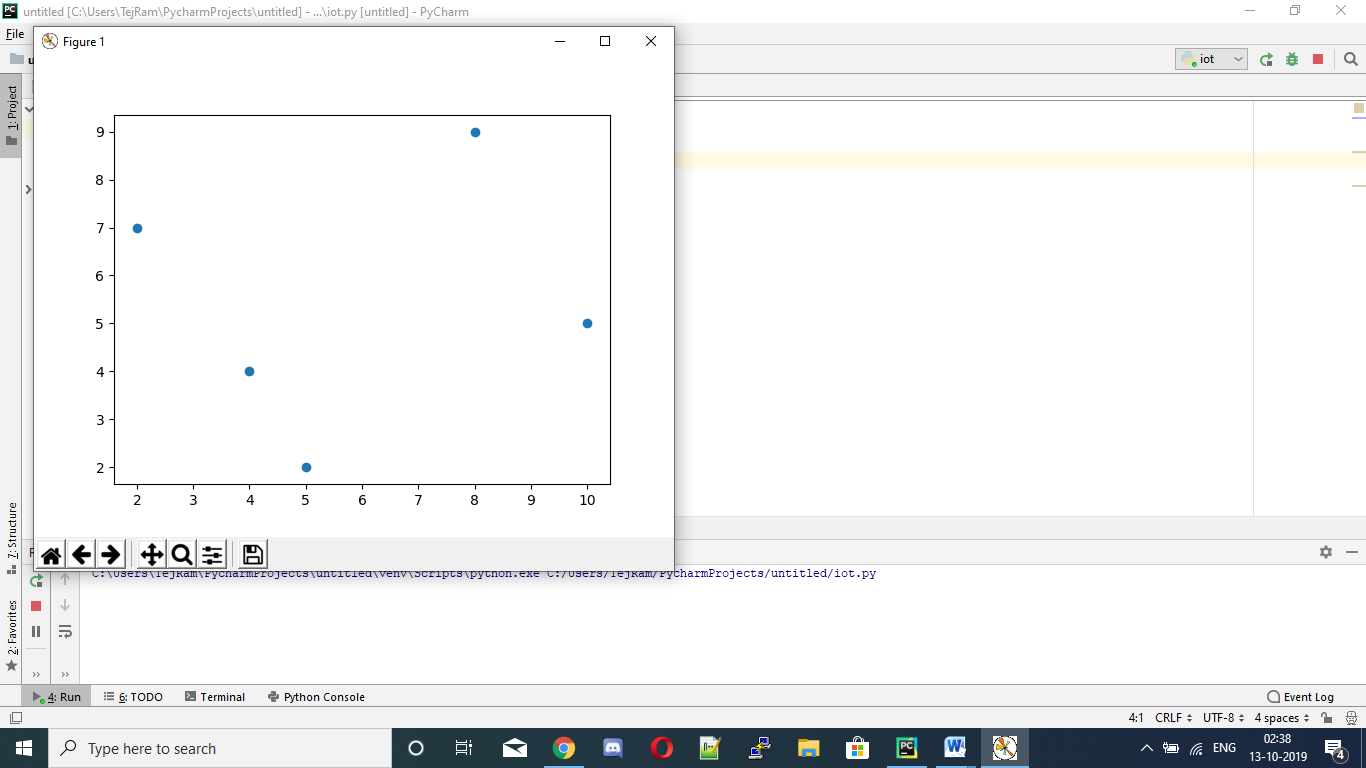
3. Histogram





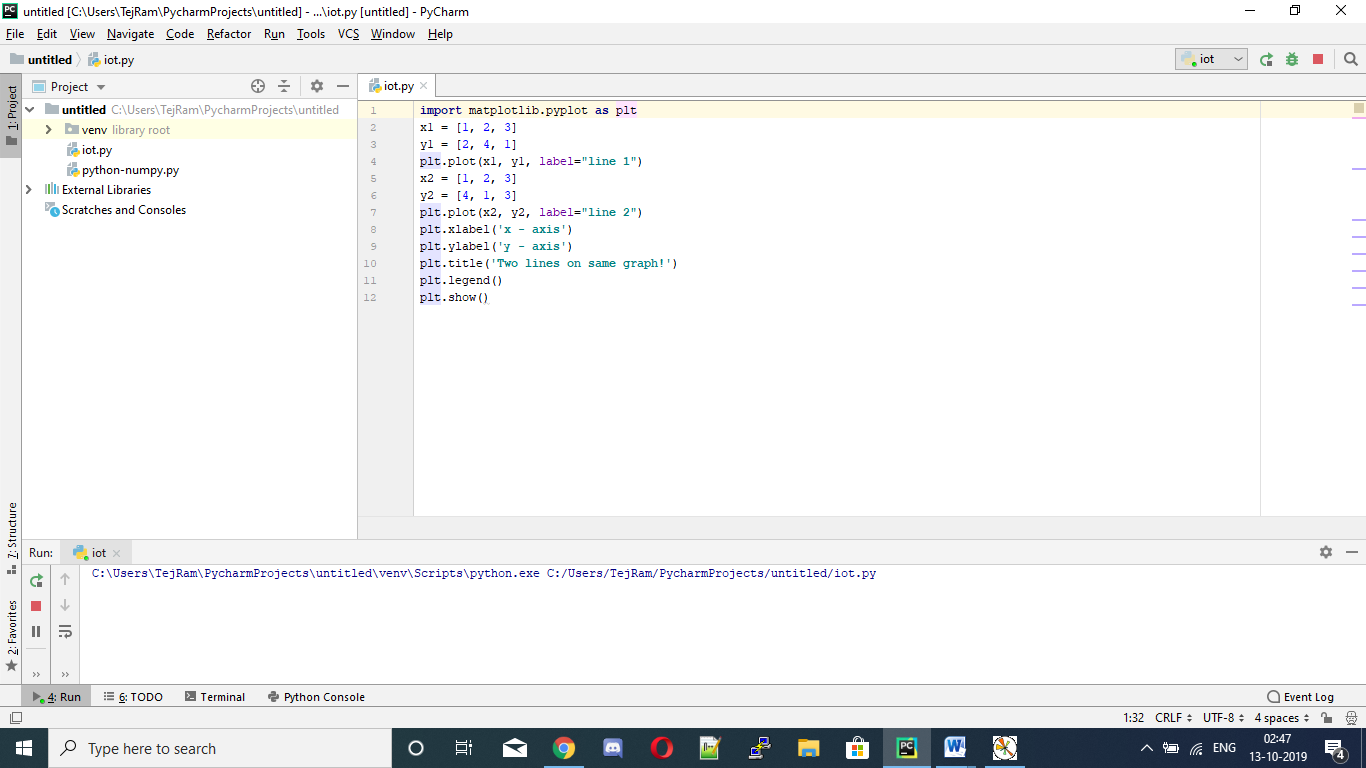
4. Scatter Plot



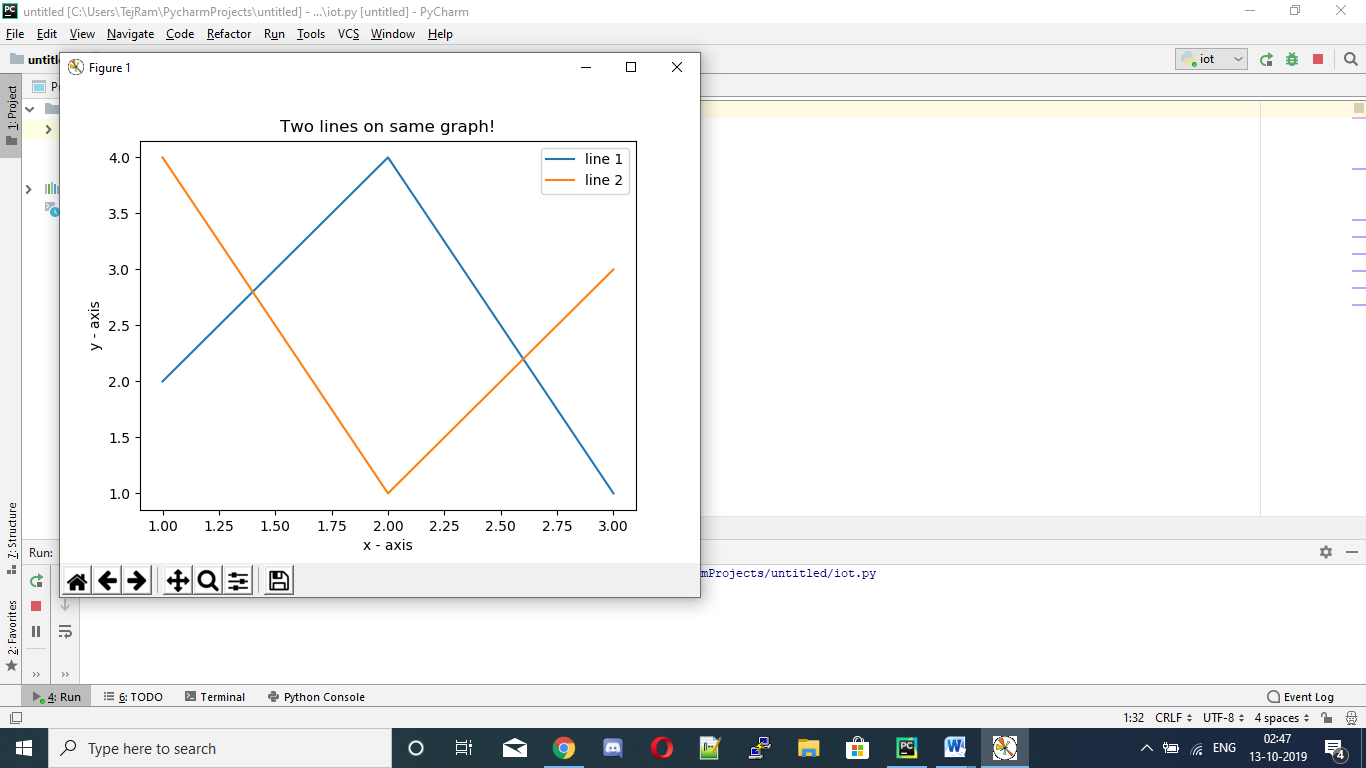


5. Plotting two or more lines on same plot

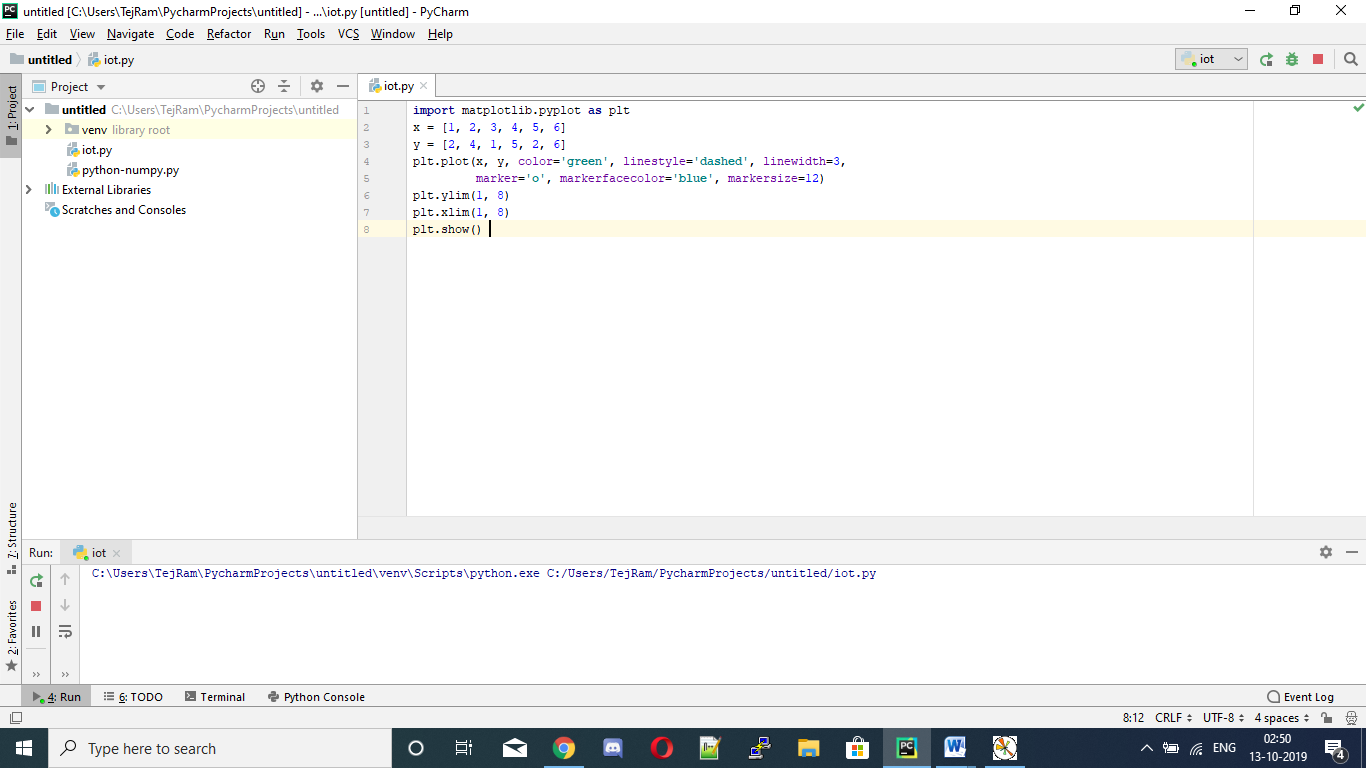
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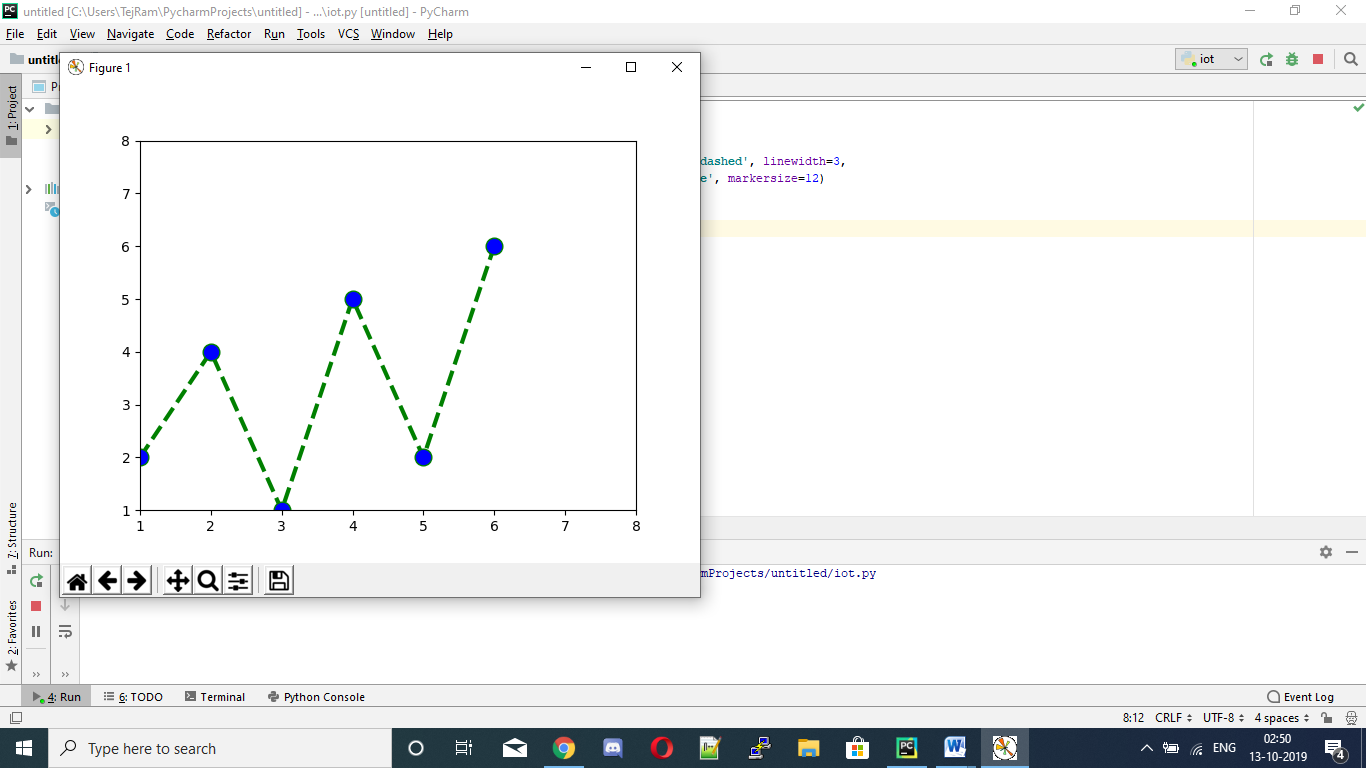


Output:-



6. Customization of Plots





7. Bar Chart

