ASSESSMENT–1

Submittedby

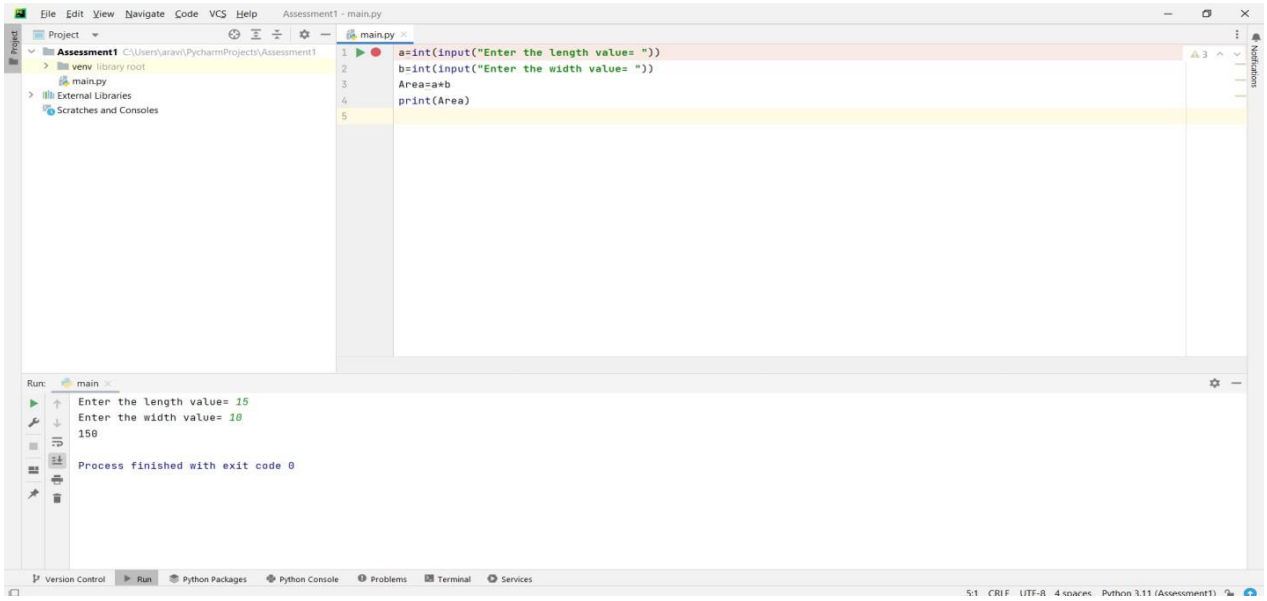
NAME :K.SINDHUJA

PIN NUMBER :20T91A0533

COLLEGE :GIET ENGINEERING COLLEGE

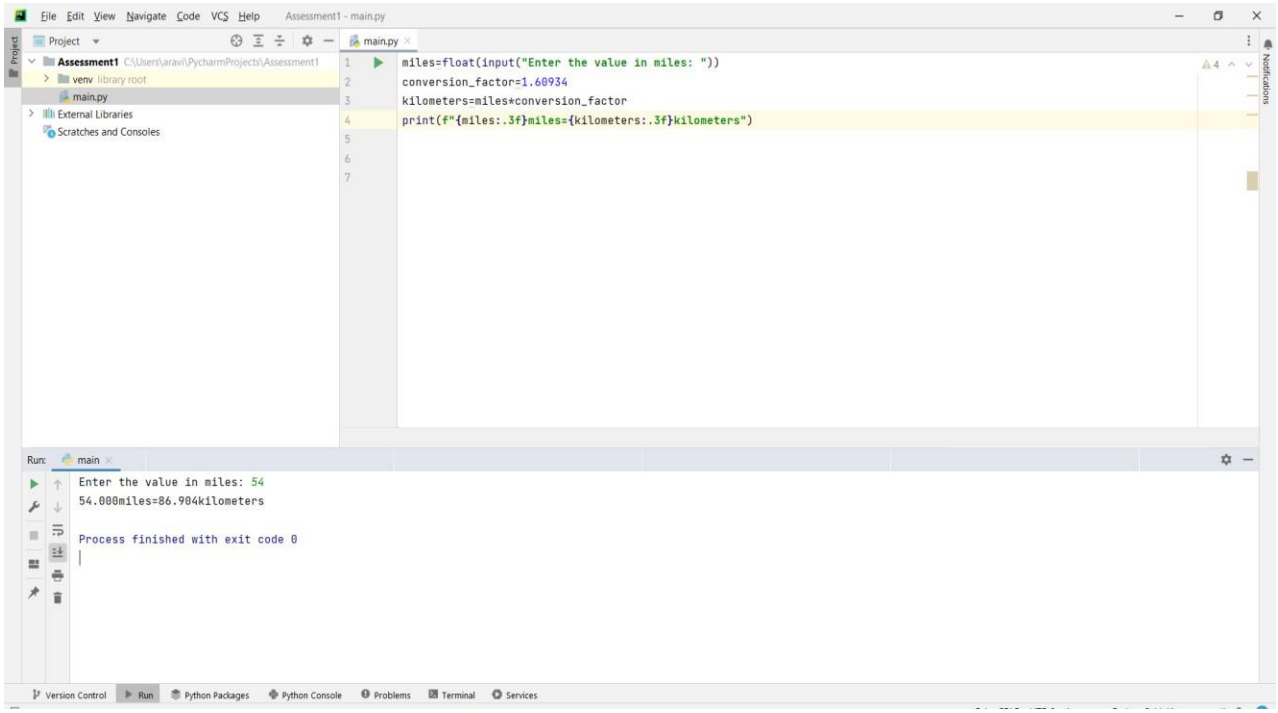
E-MAIL. :kadalisindhuja6672@gmail.com

WriteaPythonprogramtocalculatetheareaofarectanglegivenits lengthandwidth. Program :



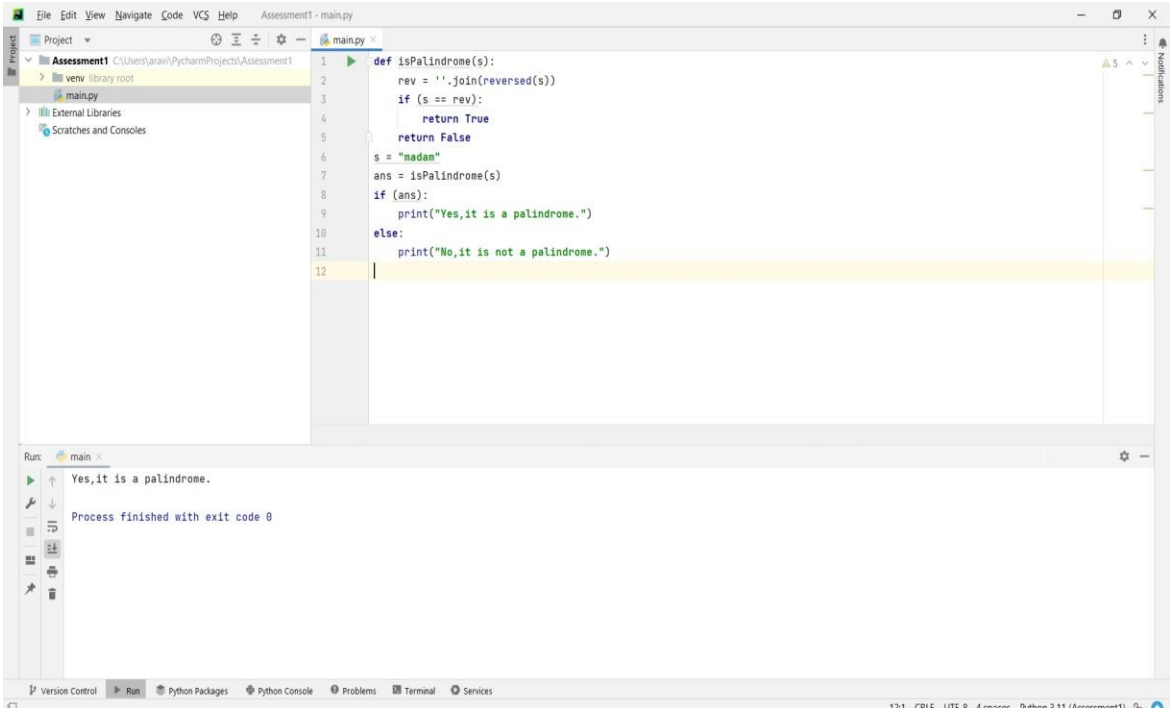
1. Writeaprogramtoconvertmilestokilometers.

   Program:



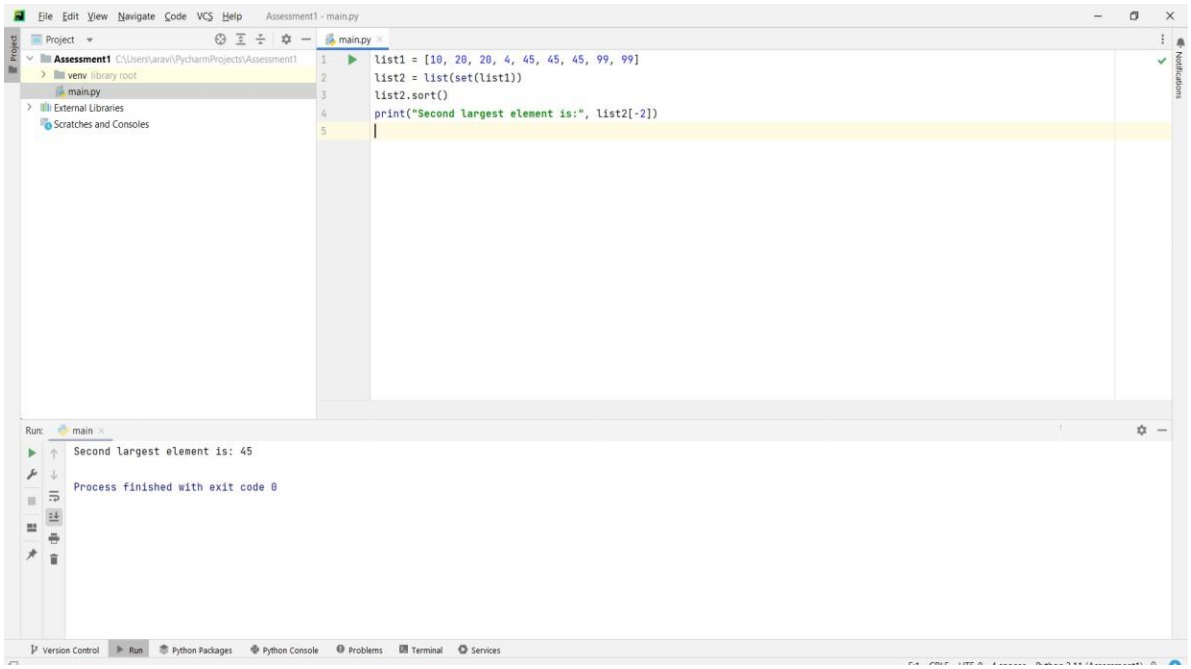
2. Writeafunctiontocheckifagivenstringisapalindrome.

   Program :



3. WriteaPythonprogramtofindthesecond largestelement ina list.

   Program:



4. ExplainwhatindentationmeansinPython.

Ans.In Python, indentation refers to the spaces or tabs at the beginning ofa line ofcode that indicate the block of code it belongs to. It is used to define the structure and hierarchy ofcode blocks, such as loops, conditional statements, and function definitions. Consistent indentation is crucial in Python because it replaces the need for curly braces or keywords to denote blocks, making the code more readable.

1. Consistency: Python relies heavily on indentation to determine the structure of code. Consistent indentation ensures that the code is organized and easy to understand.

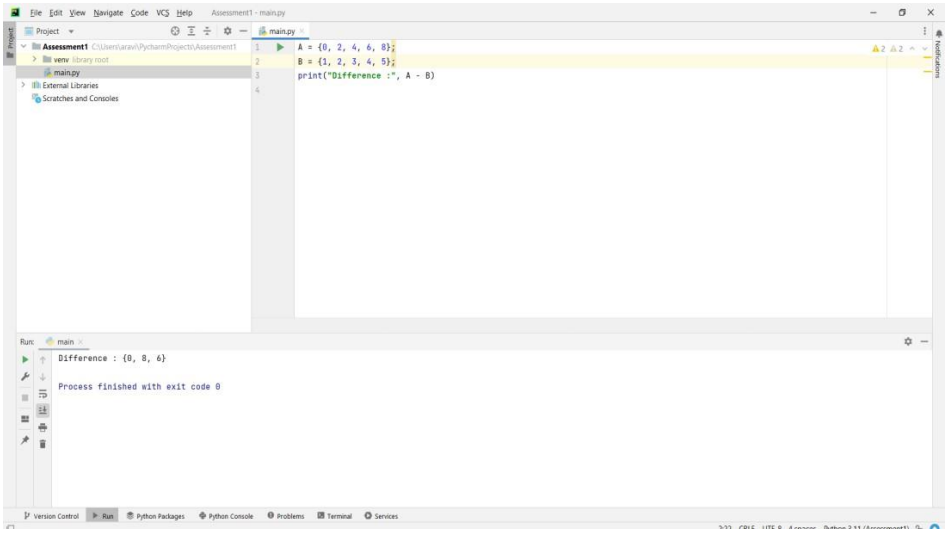
2. Whitespace: Indentation isa formofwhitespace inPython. It canbe either spacesortabs, but it's recommended to stick to one style throughout a codebase to avoid confusion.

3. Nested Blocks: Indentation allows for the nesting of code blocks within each other. For example, within a function, you might have nested loopsor conditional statements, and their indentation levels indicate their relationship.

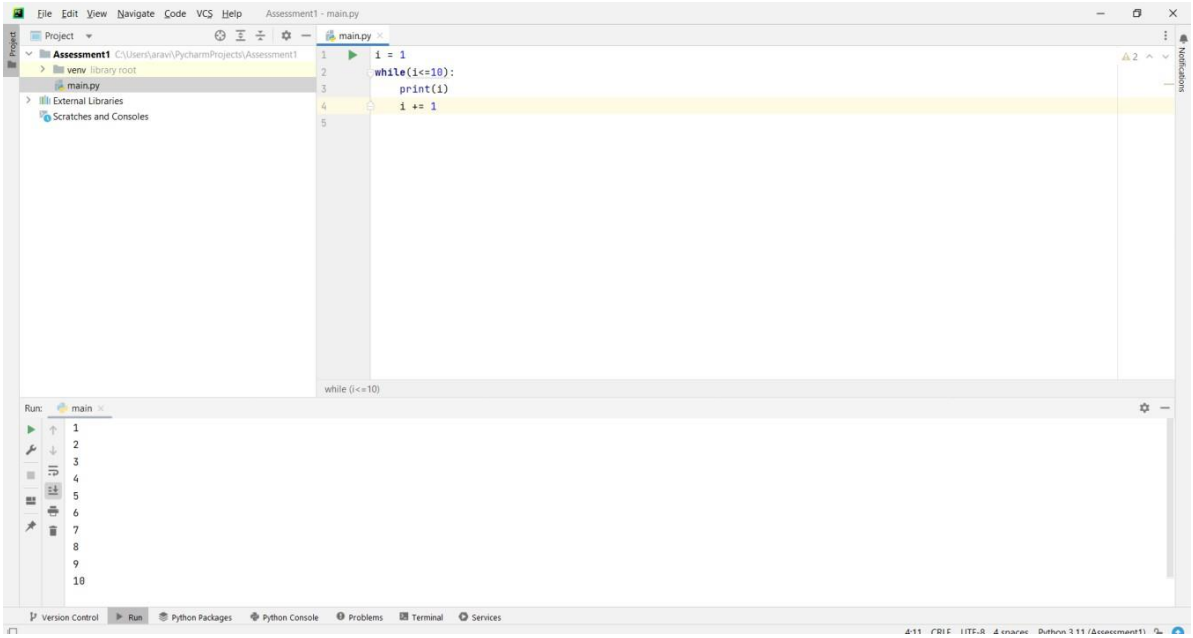
4. No Braces: Unlike many other programming languages that use braces {} to denote code blocks, Python uses indentation exclusively. This can sometimes catch new Python developers off guard if they're used to languages with explicit block delimiters.

5. Enforced by Syntax: Incorrect indentation in Python will result in a syntax error. This strict enforcement ensures that code is well-structured and readable.

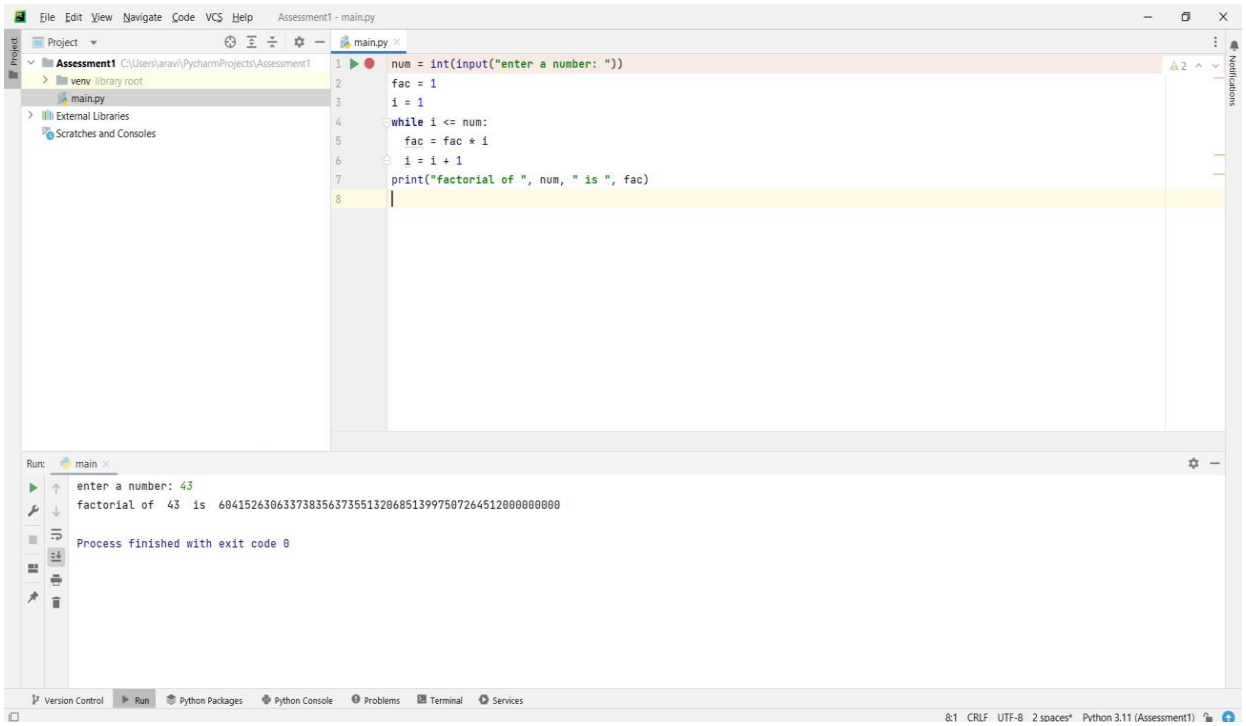
6. Writeaprogramtoperformsetdifferenceoperation.



7. WriteaPythonprogramtoprint numbers from1to10usingawhile loop.
   Program :

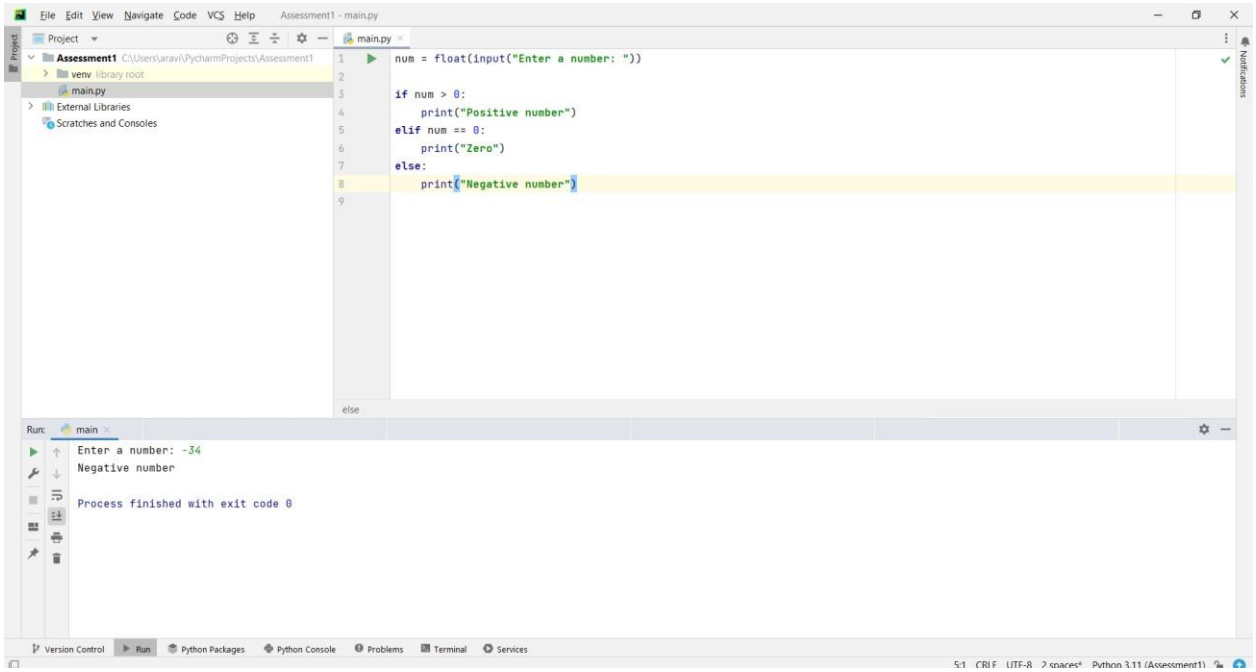


8. Writeaprogramto calculatethe factorialofanumberusingawhile loop.
   Program:



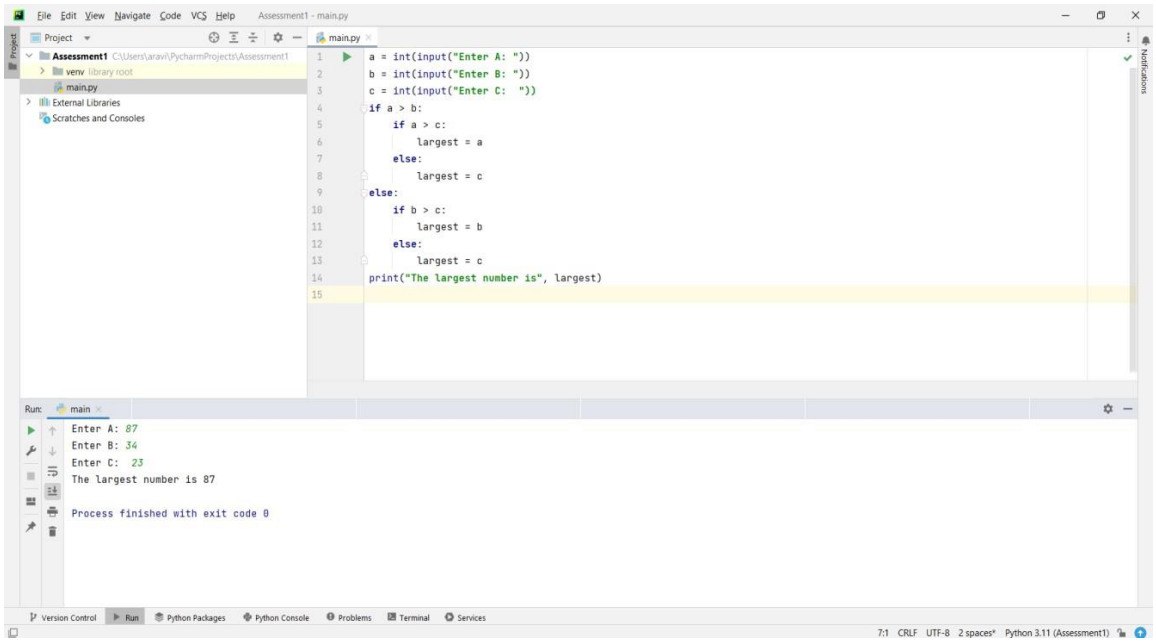
9. Write a Python program to checkif a numberis positive,negative, or zero usingif-elif-else statements.

Program:



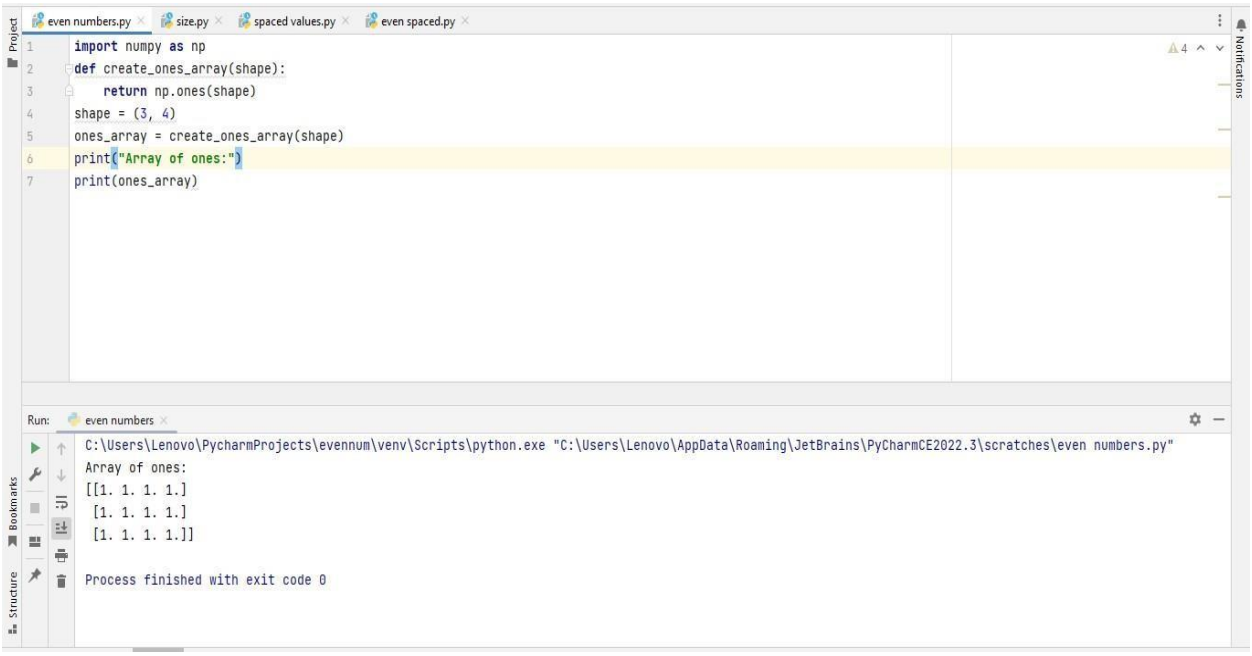
10. Writeaprogramtodeterminethe largest amongthreenumbers usingconditionalstatements.

Program :



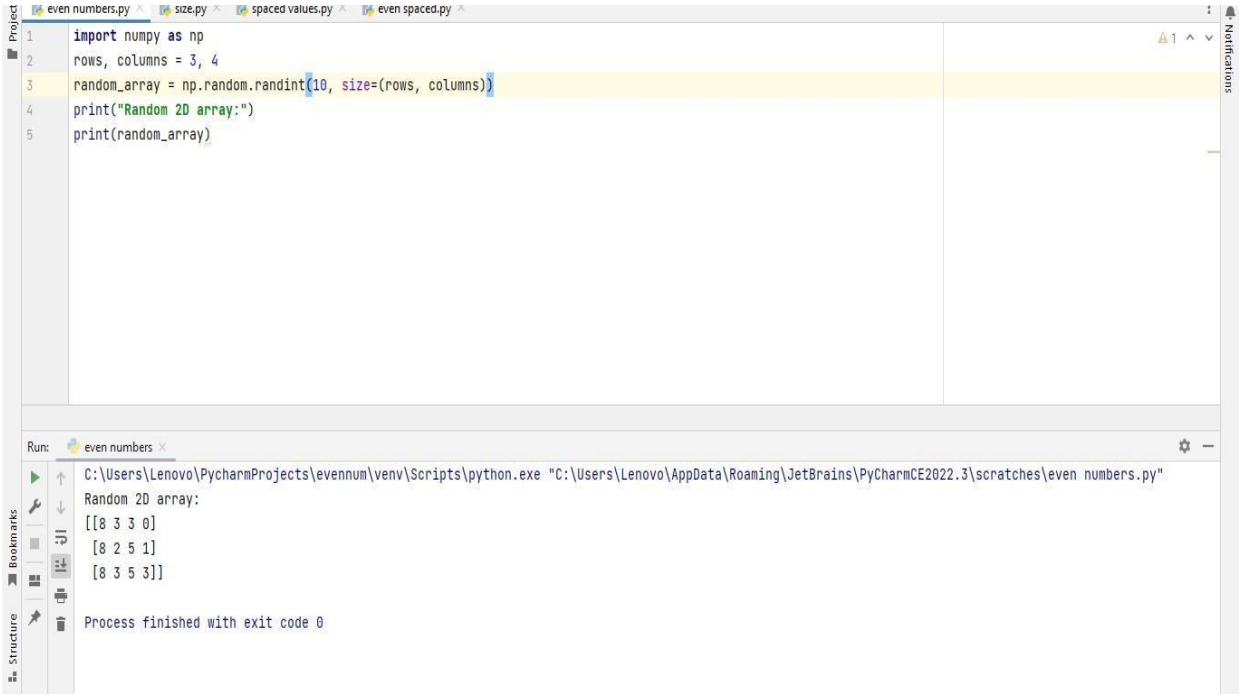
11. WriteaPythonprogramtocreateanumpyarrayfilledwithonesofgivenshape.

Program :



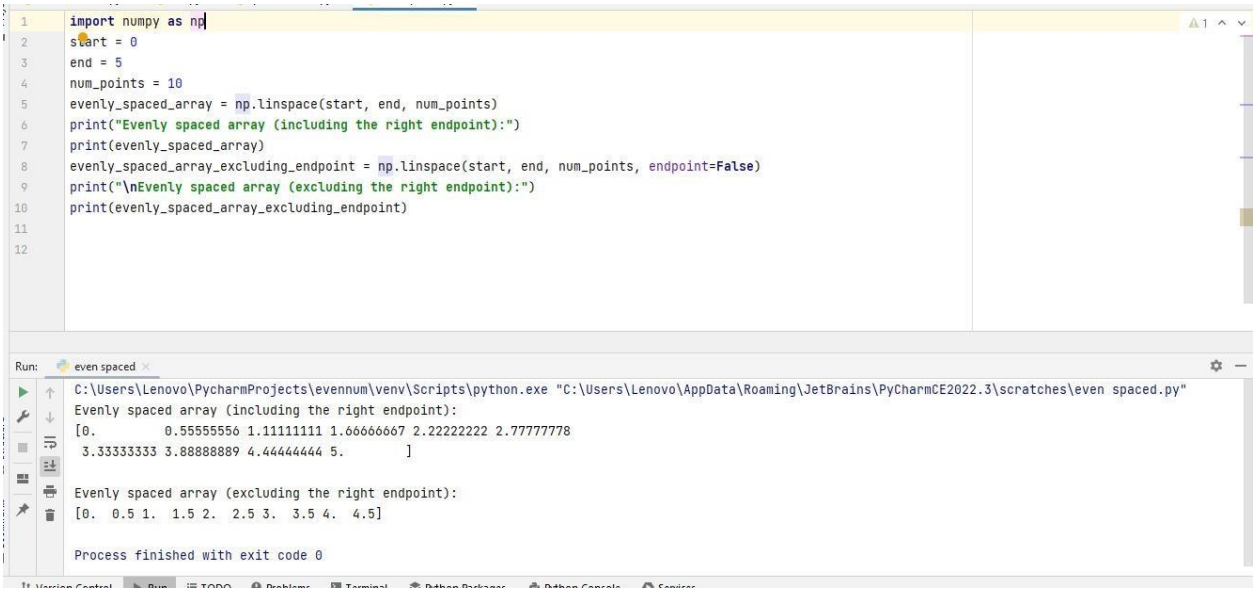
12. Writeaprogramtocreatea2Dnumpyarrayinitializedwithrandomintegers.

Program :



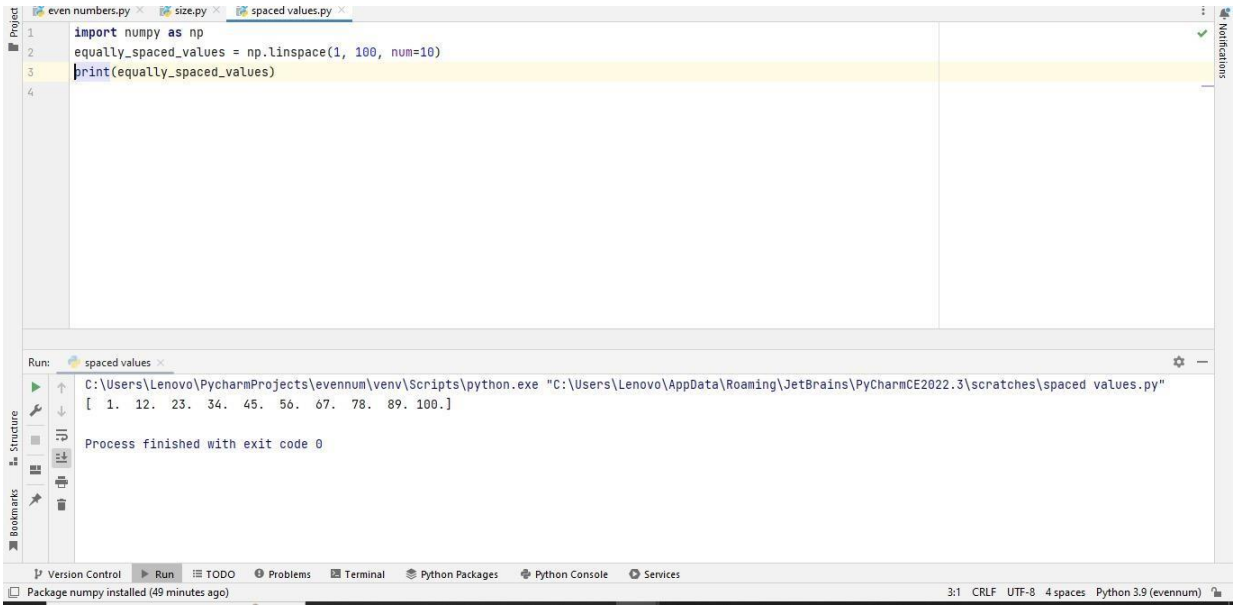
13. WriteaPythonprogramtogenerateanarrayofevenlyspacednumbersoveraspecified range using linspace.

Program:



14. Write a program to generate an array of 10 equally spaced values between 1 and 100 usinglinspace.

Program:



15. WriteaPythonprogramtocreateanarraycontainingevennumbersfrom2to20using arange.

Program:

16. Write a program to create an array containingnumbersfrom 1 to 10 with a step size of 0.5using arange.

Program: