



Assignment

#Learn With Moolya [AI Basics Training]

Few Guidelines.....

1. Please make sure to complete Python and Data Science assignments by Friday 7th July 2017 and send us on learn@moolya.com
2. Please mention the subject line as "<Your Name><Python or Data Science>"
3. Trainers are available for any queries for you on 2 channels – Ask them directly on learn-with-moolya.flock.co or send email with queries on learn@moolya.com
4. We are not looking for only codes, but for the way you are thinking how problem can be solved, which can be different for everyone.
5. Based on your answers and attendance in class, Moolya will award certificates to candidates by 15th July 2017.



Python Programming

1. Write a Python program to implement the Heron's algorithm to find square root of a given whole number.

Reference: <http://www.quickermaths.com/herons-method-of-finding-roots/>

2. Design and Implement a shopping bill algorithm.

Should support a pre-determined set of items, with pre-set prices for each. Allow the user to select the items in a sequence, and print out the total bill. Allow adding same item multiple times. Allow the shop-keeper to add/modify items to the existing list.



Python Programming

3. Design and implement "Guess the secret number" game

Reference: <https://www.theproblemsite.com/games/secret-number-game-design>

(This is different from the one we designed in the class)

4. Design and implement the "master-mind" game

Reference: <http://www.web-games-online.com/mastermind/rules.php>



Python Programming

5. Solve problems 1-10 from projecteuler.net

Reference: <https://www.theproblemsite.com/games/secret-number-game-design>

(This is different from the one we designed in the class)

NOTE: For the game problems, make suitable assumptions. All games will use a command-line interface.



Data Science , AI and Machine Learning

Download Testing and Training Data from Kaggle about House Prices: Advanced Regression Techniques

- 1.Take Training data into R and create 5 most important insights for Housing prices
- 2.Using Excel create different charts and insights which are showing impact on housing prices for different parameters.
- 3.Use Decision tree algorithm to predict housing prices and send us code with plots of decision tree.

Reference - <https://www.kaggle.com/c/house-prices-advanced-regression-techniques/data>



Data Science , AI and Machine Learning

Load Iris dataset copy in R using command `Iris_copy<-datasets::iris`

4.Build different charts which shows impact of sepal length, sepal width , petal length and petal width on determining which species of iris.

5.Build an algorithm in R which will predict type of dataset based on input values of sepal length, petal length, sepal width, petal width.

