Assignment_01

April 9, 2021

1 Assignment 01: Solve a Linear Algebra Problem

The comments/sections provided are your cues to perform the assignment. You don't need to limit yourself to the number of rows/cells provided. You can add additional rows in each section to add more lines of code.

If at any point in time you need help on solving this assignment, view our demo video to understand the different steps of the code.

Happy coding!

[ ]:
```
"""Solving Linear Algebra problem using SciPy

DESCRIPTION

Problem:

Use SciPy to solve a linear algebra problem.

There is a test with 30 questions worth 150 marks. The test has two types of␣
↪questions:

1. True or false - carries 4 marks each

2. Multiple-choice - carries 9 marks each

Find the number of true or false and multiple-choice questions."""
```

1: Import required libraries

[1]:
```
import numpy as np
from scipy import linalg
```

2: Formulate two linear equations based on the given scenario

[6]:
```
#x = True or false questions
#y = Multiple-choice questions
#total no. of questions: x+y=30
#total marks 4x+9y=150
```

```
Variables=np.array([[1,1],[4,9]])
Values=np.array([30,150])
```

3: Apply a suitable method to solve the linear equation

[11]:
```
No_of_TF_ques,No_of_MC_Ques = linalg.solve(Variables,Values)
```

[13]:
```
print('no.of True or False Questions: {}\nno.of Multiple Choice Questions: {}'.
 ↪format(No_of_TF_ques,No_of_MC_Ques))
```

```
no.of True or False Questions: 24.0
no.of Multiple Choice Questions: 6.0
```

[ ]:
```

```