

Computing Applications for Engineers

PALS 4

Question 1

A university is trying to determine the total amount of time students study per semester. Develop a Matlab script that requests the user to enter the average amount of time he/she studies per day in minutes and displays the total amount of time used to study for 1 semester (14 weeks). The total time displayed should be in hours and minutes.

Question 2

Write a Matlab script that asks the user the day of the week and then displays to the user the number of days to the weekend or display that it is already the weekend.

Question 3

Write a Matlab script that draws a square matrix in the following pattern (the outer most ring starts from 1 and every subsequent inner ring, the value increases by 1). The size of the matrix is determined by the user.

Example:

Size=3

```
1  1  1
1  2  1
1  1  1
```

Size = 10

```
1  1  1  1  1  1  1  1  1  1
1  2  2  2  2  2  2  2  2  1
1  2  3  3  3  3  3  3  2  1
1  2  3  4  4  4  4  3  2  1
1  2  3  4  5  5  4  3  2  1
1  2  3  4  5  5  4  3  2  1
1  2  3  4  4  4  4  3  2  1
1  2  3  3  3  3  3  3  2  1
1  2  2  2  2  2  2  2  2  1
1  1  1  1  1  1  1  1  1  1
```