



MTU

Ollscoil Teicneolaíochta na Mumhan
Munster Technological University

ASSIGNMENT 2

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Module: Linear Data

Date: 02/11/22

Output 1

```
// 1
input: four numbers A, B, C, Y
output: A, B, C dividend by Y. s value
Start
Prompt the user to enter the first integer A
Prompt the user to enter a second integer B
Prompt the user to enter the third integer C
 $x \leftarrow A + B + C$ 
Display an output prompt that explains the answer as the sum
Prompt the user to enter the integer Y
Read the value of Y
 $A \leftarrow x / Y$ 
Write the value of A
Stop

// 2
input: one number F
output: value c
start
Prompt the user to enter the integer F
Read the value of F
 $C \leftarrow (F - 32) * (5/9)$ 
Write the value of C
Stop

// 3
input: radius of the sphere, R
output: volume of the sphere value of V
start
INITIALIZE Pi,  $Pi = 3.14149$ 
Prompt the user to enter the radius of the sphere
Read the radius of the sphere, R
COMPUTE for the volume of the sphere,  $V \leftarrow (4.0/3.0) * Pi * r^3$ 
WRITE the volume of the sphere, V
stop

// 4
input : distance(km), time(hr)
output : Speed(km/hr), S
start
Prompt the user to enter the distance traveled
Prompt the user to enter the time taken
Read the distance, time
Compute the value of speed,  $S \leftarrow (distance/time)$ 
WRITE the speed, S
Stop
```

Output 2

```
Create an empty list.  
List should be empty; isEmpty returns true.  
  
Testing add to end:  
List should contain 15, 25, 35, 45.  
The list contains 4 entries, as follows:  
15 is entry 1  
25 is entry 2  
35 is entry 3  
45 is entry 4  
  
List should be empty; isEmpty returns false.  
  
Testing clear():  
List is empty  
List should be empty; isEmpty returns true.
```

Output 3

```
Create an empty list.  
List should be empty; isEmpty returns true.  
  
Testing add to end:  
List should contain 15, 25, 35, 45.  
The list contains 4 entries, as follows:  
15 is entry 1  
25 is entry 2  
35 is entry 3  
45 is entry 4  
  
List should be empty; isEmpty returns false.  
  
Testing clear():  
List is empty  
List should be empty; isEmpty returns true.
```

Code Link

<https://replit.com/join/oufzhawyzd-laibaasif3>