

CH10_005

EXERCISE

USING TORQUE DATA TYPES

Exercise Files

Starter – "engine/exercises/chapter10/exer_005.cc"

Answers – "engine/answers/chapter10/exer_005.cc"

Exercise Mission

n/a

Special Steps

Please remember, when you modify the engine and compile, you must copy the new executable over to your Kit/directory before you can run it and see the changes in the Kit (as instructed below).

Synopsis

In this exercise, we will test your ability to use Torque Data Types to replace intrinsic types.

Prerequisites

1. *ch1_001.pdf "Using The Kit"*

Exercises

1. *Basic Messaging (pg 2)*

USING TORQUE DATA TYPES

1 Converting To Torque Types

Goal: Replace all of the applicable intrinsic data types with Torque Data Types and successfully compile the changes.

Starter Code: You are provided with one function body to start this exercise.

```
ConsoleFunction(ch10_exer_005, void, 1, 1, "")
{
    signed char count = 0;
    float value = 3.14159f;

    for(; (count >= 0) && (count <= 127); count++)
    {
        if( 0 == (count % 2) )
        {
            Con::printf("On count %d value == %f", count ,
                        value * (float) count );
        }
        else
        {
            Con::printf("On count %d value == %f", count ,
                        value * (float) -count );
        }
    }
}
```

Steps:

1. Please find and replace any and all intrinsic types with Torque data types.
2. Please replace the max loop value with a suitable Torque constant.
3. Please replace the initialization of the variable "value" with a suitable Torque constant.

USING TORQUE DATA TYPES

Output Goal:

After you successfully compile your code, you can start the kit, and open the console (~). Then, you can run the following command and you should receive the listed output.

```
==>ch10_exer_005();  
On count 0 value == 0.000000  
On count 1 value == -3.141593  
On count 2 value == 6.283185  
On count 3 value == -9.424778  
On count 4 value == 12.566371  
On count 5 value == -15.707964  
On count 6 value == 18.849556  
On count 7 value == -21.991149  
etc....
```