

Practice Exercise #02: Distance Conversion

http://www.comp.nus.edu.sg/~cs1020/4_misc/practice.html

Reference: Week 1 Java Basics

Objectives:

1. Converting a simple C program to Java program
2. Input/output in Java
3. Using constant
4. Review Java naming convention

Task statement:

In CS1010 Week 2 example 3[†], we show a C program to convert miles to kilometers. The program is given below.

```
// Converts distance in miles to kilometers.
#include <stdio.h>
#define KMS_PER_MILE 1.609

int main(void) {
    double miles, kms;

    printf("Enter distance in miles: ");
    scanf("%lf", &miles);

    kms = KMS_PER_MILE * miles;
    printf("That equals %9.2f km.\n", kms);

    return 0;
}
```

Convert the program into a Java program **MileToKm.java**.

Use a constant in your program. (Note that CodeCrunch is unable to detect if you have used a constant. Make sure you do use one, and adhere to **Java naming convention**[‡] for constants – constant names should be in uppercase characters, with words separated by underscore.)

Sample runs:

```
Enter distance in miles: 28.7
That equals          46.18 km.
```

```
Enter distance in miles: 371.5
That equals          597.74 km.
```

[†] Lecture slides for CS1010 are available on http://www.comp.nus.edu.sg/~cs1020/4_misc/cs1010_lect.html

[‡] [http://en.wikipedia.org/wiki/Naming_convention_\(programming\)](http://en.wikipedia.org/wiki/Naming_convention_(programming))