Exercise Metric Conversions

- Complete the ***skeleton code*** that converts metric to imperial system measurements. Measurements are provided to your program in meters, grams or degrees Celsius and must be converted to feet, pounds and degrees Fahrenheit, respectively, where:
  - 1 meter = 3.2808 feet;
  - 1 gram = 0.002205 pounds;
  - temperature in degrees Fahrenheit = 32 + 1.8 × temperature in degrees Celsius.
- On the first input line you are given the number of conversions to be made.
  Each of the following lines contains a value to be converted as well as its unit: m, g or c (for meters, grams or degrees Celsius).
  There will be a space between the number and the unit.
- Display the converted values with *2 decimal places*, followed by a space and their unit: ft, lbs or f (for feet, pounds or degrees Fahrenheit).

Exercise Metric Conversions

- Test case 1 :

  Input:

  ```
  3
  36.4 c
  25 m
  987.321 g
  ```

  Output:

  ```
  97.52 f
  82.02 ft
  2.18 lbs
  ```

Exercise Metric Conversions Skeleton Code

```c
#include <stdio.h>
// add two more prototypes
double metersToFeet(double);

// complete the main function to read input, call functions, and display output
int main() {

    return 0;
}
// complete the function below
double metersToFeet(double meters) {

}

// and add two more functions
```

you can copy paste this skeleton code into Codecast, complete and test it there, and then copy paste to ***complete the skeleton code*** in LMO Exercise autograder

WARNING: Hints to the exercise on the next slide

Please try to solve the exercise by yourself first...

Exercise Metric Conversions Hints

- Add the two prototypes. Don't forget to end with ;
- In main function:
  - read number of conversions
  - loop that many number
    - read the value in double and the unit character, separated by a space
    - use if-else to call the functions based on the unit character, and print the result of the function call
- Complete and write the definitions of the three functions
  - make sure you multiply and add with the correct constants