COSC 051 Homework Functions

In this homework, you are asked to write several functions:

1. A function named **initAsteroids()** that accepts arrays (or other containers) as formal parameters and sets the initial attributes of at least twenty (20) **sf::CircleShapes** including:
    - sets the radius of each sf::CircleShape to a **random** size. The size is a random value between the interval [10, 100]
    - sets the color of each sf::CircleShape. The color should also be set randomly.
    - Set the initial position of each sf::CircleShape randomly
    - Use a random number generator library. You can read about them at
        - https://en.cppreference.com/w/cpp/numeric/random
        - https://en.cppreference.com/w/cpp/numeric/random/uniform_int_distribution

    Note I did not specify the return type or formal parameters. This is part of your design.

2. A function named **updateAsteroid()**, that updates each asteroids position and resets an asteroids' position if it travels off screen. The behavior is similar to asteroid behavior from previous assignment.

3. A function named **playerCollision()**. This function returns the index of the asteroid that collided with the player or -1, if no collision occurred.

Use your newly written functions in main() demonstrating coding and visual movement and interactions of objects.

All of these functions require formal parameters and may return a value. You are to determine the parameters and return type of the functions. You may not use global variables. The object of the homework is to refactor code you already wrote into functions – making your program more modular.