

Airplane Take Off App

As we all know, conventional aircraft such as jets must reach a certain speed before they can take off. The required speed, known as *velocity*, enables lift, maneuverability, and safety requirements to be satisfied. Your job is to write an application that calculates how much time it will take for certain aircraft to reach their required takeoff velocity.

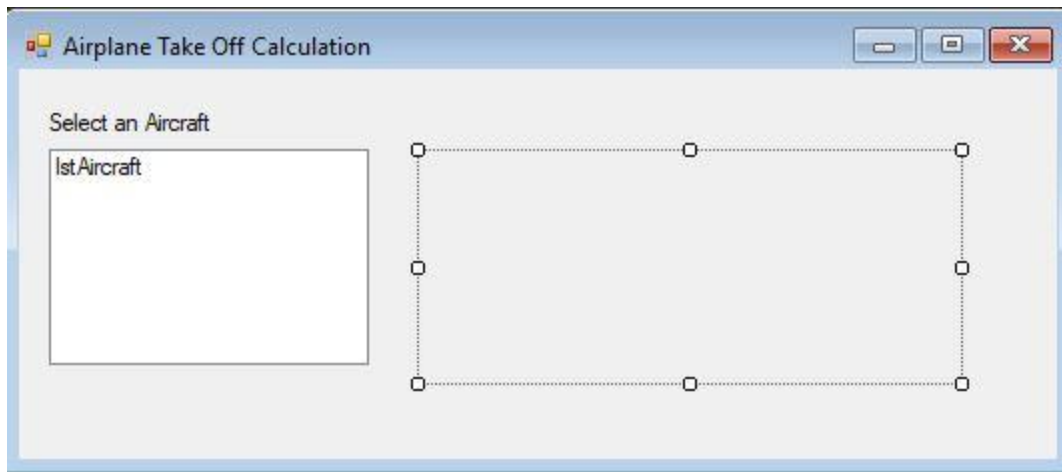
You will also calculate how many feet of runway will be required. (Ignore the extra runway space normally required to allow an aircraft to safely abort a takeoff.)

For each aircraft, you are given (1) its name, (2) its required takeoff velocity (feet/second), and (3) how quickly it accelerates (feet/second²). Use the following arrays:

```
Names() - A-747, A-737, C-150, D-240  
TakeoffVelocity() - 250, 264, 270, 240  
Acceleration() - 33.5, 44.2, 37.1, 51.9
```

The names and values are, of course, fictitious. Create an Aircraft class that holds the corresponding information for one aircraft. It should have a ToString method that returns the aircraft name.

In your startup form, create and fill an array of Aircraft objects. Then insert the array in a ListBox control. When the user selects an aircraft, your program should calculate and display the required takeoff velocity, the acceleration constant, the time required to take off, and the number of feet the aircraft will travel on the runway before leaving the ground. Format the output as a sentence



Form elements:

- **IstAircraft**—displays types of airplanes
- **IblResult**—displays result of the calculation

Formatted Output Example:

