

# Python Alien Detector

Time required: 60 minutes

- Comment each line of code as shown in the tutorials and other code examples.
- Follow all directions carefully and accurately.
- Think of the directions as minimum requirements.

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## Pseudocode

1. Write pseudocode for the exercise
2. Save it in a document
3. Submit with the assignment

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## Requirements

The United States Space Force Strategic Command has hired you to create a program to detect and track the different types of aliens that visit our planet. They would like you to build a prototype before they give you the contract. The contract is worth several millions dollars, you want to get this program right.

1. Create an Alien class.
  - a. Include at least three properties of your choice, such as the number of eyes the Alien has.
  - b. Include a constructor that requires a value for each data field.
  - c. Override the `__str__` that returns a string containing a complete description of the Alien. (An explicit `__str__` method replaces the default `__str__` method that is inherited from Object.)
  - d. Add a detector method that shows your detector detecting aliens.
2. Save the file as **alien.py**
3. Create two classes - Martian and Jupiterian that descend from Alien parent class.
  - a. Supply each with a constructor that sets the Alien data fields with values you choose.
  - b. Add a child constructor that adds another property for each child class.

4. Save the files as **`martian.py`** and **`jupiterian.py`**
5. Create an application that instantiates one Martian and one Jupiterian.
6. Print the object and display the results.

Save the application as **`create_aliens.py`**

Example application run:

```
Martian: Alien height is 7 feet.  
It has 3 legs and 4 eyes.  
Jupiterian: Alien height is 2 feet.  
It has 8 legs and 2 eyes.
```

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## Assignment Submission

1. Attach the pseudocode.
2. Attach the program files.
3. Attach screenshots showing the successful operation of the program.
4. Submit in Blackboard.