

# Programming Exercise 12.2

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## Managing Student Records

**Purpose.** Learn how to put an object specification into a program, and how to customize its data fields. Learn how to declare objects using an object specification, and assign values to its data fields. Learn how to use an object as an *input* parameter in a function call, and as an *output* parameter, too.

Write a program that the college Admissions office can use to manage the records of students.

**Requirements.** Write `studentObjects.cpp`, per this specification:

1. Create an object specification with these eight data fields: name, address, city, state, zip, gender, student id, and gpa.
2. In main, declare 3 uninitialized student objects, using either a fixed size array or individual objects -- your choice.
3. Write a value-returning function to create and return a *single student object*. Design console prompts and input statements in the function for the eight data fields. Call the function three times – once to initialize each of main's student objects.
4. Write a void function to output *nicely formatted* labels and values for a single student object's data fields. Call the function three times – once for each student object.

**Program I/O.** Input: from the console keyboard, the personal information for each of 3 students, one student at a time. Output: a labeled summary of the personal information as entered for each of 3 students.

**Example.** Your program's console I/O should look something like this, with user input in **blue**:

```
Enter for Student 1
name: Joe Student
address: 321 Golf Club Road
...
```

```
Enter for Student 3
...
gpa: 2.64
```

```
Output for Student 1
name: Joe Student
address: 321 Golf Club Road
...
```

```
Output for Student 3
...
gpa: 2.64
```