

```

1  """
2  CS241 Checkpoint 3A
3  Written by Chad Macbeth
4  """
5
6  # Classes encapsulate (combine) data and functions together into a convenient
7  # data structure. A variable can be created using the class. This is called
8  # an object. Objects can be passed between functions. In this case, when
9  # the Student object is passed into display_student, the name and id information
10 # can be used.
11 #
12 # Every function in a class will have a parameter called self. You will use
13 # self when using class data and class functions.
14
15 class Student:
16
17     ### Initialize a Student
18     def __init__(self):
19         self.first_name = ""
20         self.last_name = ""
21         self.id = 0
22
23     ### Prompt for a Student and return a Student object
24     def prompt_student():
25         new_student = Student() # Create a new Student object using "Student()".
26                                # This will call the __init__ function
27
28         # Save user input into the student object
29         new_student.first_name = input("Please enter your first name: ")
30         new_student.last_name = input("Please enter your last name: ")
31         # Combine the int and input commands into one
32         new_student.id = int(input("Please enter your id number: "))
33         return new_student
34
35     ### Display information in a Student object
36     def display_student(curr_student):
37         print("{} - {} {}".format(curr_student.id,
38                                   curr_student.first_name,
39                                   curr_student.last_name))
40
41     ### Driver to test functions
42     def main():
43         my_student = prompt_student()
44         print()
45         print("Your information:")
46         display_student(my_student)
47
48 if __name__ == "__main__":
49     main()
50
51
52
53

```