|  | Initials |
| --- | --- |
| Create a new project called “Chapter 2 Sample Test” |  |
| 1. In the project, create a new class called “Hamburger” |  |
| 2. The Hamburger class will have 5 fields, price (int), numberOfPatties (int), hasCheese (boolean), hasMustard (boolean), hasKetchup (boolean) |  |
| 3. The Hamburger class will have a constructor that sets price (default price is 199 cents). The default values of the boolean fields are set to false. The default number of patties is 1. |  |
| 4. Create the accessor methods for each of the fields. |  |
| 5. Create a mutator for each of the boolean fields. |  |
| 6. Create a method called addPatty. It will increase the number of patties by one, up to a maximum of 4. If they try to add a fifth patty, an error message should be printed. |  |
| 7. Create a method called addCheese. It will set the hasCheese field appropriately. If the burger already has cheese, it will print a message stating so. |  |
| 8. Edit the addPatty method, so that each additional patty adds 100 cents to the cost of the burger.  Edit the addCheese method, so that the addition of cheese increases the price by 50 cents. |  |
| 9. Create a method that creates a String based on the price. For example, if the burger costs 199 cents, the method returns the String “$1.99”. |  |
| 10. Create a method that prints out information about the burger. Include, in plain English, the information. For example:Burger with 2 patties, cheese. Cost: $1.99Or Burger with 1 patty, ketchup, mustard. Cost: $2.99 |  |
|  |  |
| 11. New Scenario: A class has a field called **numberOfSongs** of type **int**. The **setNumberOfSongs** mutator method is written below:**public void setNumberOfSongs(int numberOfSongs)****{****numberOfSongs = numberOfSongs;****}**This method compiles but fails to set the **numberOfSongs** field properly. Why?Write the **setNumberOfSongs** method correctly. |  |