*Part I: music-organizer-v1 project (homework, prior to the lab session)*

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*(step by step from part 1)*

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AI-generated content may be incorrect.1. added 5 invented songs. Output is 5. 5 songs in total.

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AI-generated content may be incorrect.2. Since there wasn’t any list in the first place. It proceeded as normal without any files. It simply gave an output of the number you gave it.

3. It executes the command, even without a file. It simply executes the int given. Same for listFile(1). I expected it to do the same as previously shown in point 2.

A close-up of a computer screen

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AI-generated content may be incorrect.4.addind an ArrayList named library, and its element is type Book.

5. Write a declaration of a local variable called cs101 that can hold an ArrayList of Student.

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AI-generated content may be incorrect.6. Write a declaration of a private field called tracks for storing a collection of MusicTrack objects.

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8. If a collection stores 10 objects, what value would be returned from a call to its size method?

Answer: 9

9. Write a method call using get to return the fifth object stored in a collection called items.

Answer:

public File getObject()

{

Return items.get(4);

} ???

10. What is the index of the last item stored in a collection of 15 objects?

Answer: 14

11. Write a method call to add the object held in the variable favoriteTrack to a collection called files.

Answer: files.add(favoriteTrack);

12. Write a method call to remove the third object stored in a collection called dates.

Answer:

public void File removeObject()

{

dates.remove(2);

}

13. Suppose that an object is stored at index 6 in a collection. What will be its index immediately after the objects at index 0 and index 9 are removed?

Answer: index 5

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15.

16.

*I didn’t record part 2..*

*Part III: music-organizer-v3 project*

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AI-generated content may be incorrect.*21. printing all the songs

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AI-generated content may be incorrect.23. personal testing

24. Challenge exercise: The for-each loop does not use an explicit integer variable to access successive elements of the list. Thus, if we want to include the index of each filename in the listing, then we would have to declare our own local integer variable (position, say) so that we can write in the body of the loop something like: System.out.println(position + ": " + filename);

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AI-generated content may be incorrect.See if you can complete a version of listAllFiles to do this. Hint: You will need a local variable declaration of position in the method, as well as a statement to update its value by one inside the for-each loop.

25. Add the listMatching method in Code 4.4 to your version of the project. (Use music-organizer-v3 if you do not already have your own version.) Check that the method only lists matching files. Also try it with a search string that matches none of the file names. Is anything at all printed in this case?

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It prints out something only if you had added files into the list with similar names. Otherwise, it would just print the file you wrote once.

26. Challenge exercise In listMatching, can you find a way to print a message, once the for-each loop has f inished, if no file names matched the search string? Hint: Use a boolean local variable.

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Every time the song doesn’t match it will print out “no match found” until it finds a match. It does this because it’s running through a loop until it finds a match 😊.

A screenshot of a computer program

AI-generated content may be incorrect.27. Write a method in your version of the project that plays samples of all the tracks by a particular artist, one after the other. The listMatching method illustrates the basic structure you need for this method. Make sure that you choose an artist with more than one file. Use the playSample method of the MusicPlayer (provided in music-organizer-v3). The playsample method plays the beginning of a track (about 15 seconds) and then returns.

"BigBillBroonzy - BabyPleaseDontGo1"

“BlindBlake-EarlyMorningBlues”

“BlindLemonJefferson-matchBoxBlues”

“BlindLemonJefferson-OneDimeBlues”

…?

28. Write out the header of a for-each loop to process an ArrayList<Track> called tracks. Don’t worry about the loop’s body.

For(track trac : tracks) {

(body)

}

29. Suppose we express the first version of the key search in pseudo-code as follows:

boolean missing = true;

while(missing) {

if(the keys are in the next place) {

missing = false;

}

}

Try to express the second version by completing the following outline:

boolean found = false;

while(. . .) {

if(the keys are in the next place) {

…

}

}

While loops will continue until it finds a false statement. This time it terminate once found becomes true.

Boolean found = false;

While(!found){

If(the key are in the next place){

Found = true;

}

}

30. Write a while loop (for example, in a method called multiplesOfFive) that prints out all multiples of 5 between 10 and 95.

Public void multiplesOfFive(){

Int num = 10; //where I start and I want to finish incrementing by 5 until it reaches 95

While (num <= 95){ //looping until <= 95

System.out.println(num);

Num += 5; //it will repeat printing and increment it by 5 until it gets to 95.

break; //in case the the loop continues to run for no reason :P

}

}

31.Write a while loop to sum the values 1 to 10 and print the sum once the loop has finished.

int i = 1; //starting at 1

while (i < 10 + 1) { //loops until 10 and will execute 1 to 9 + 1 = 10

System.out.println(i);

i++; //incrementation of one after each pass in the body until the condition is met

}

32. Write a method called sum with a while loop that adds up all numbers between two numbers a and b. The values for a and b can be passed to the sum method as parameters.

Public int sum(int a, int b){

a = 1;

b= 5;

while( ){

}

}

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34.