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| **APCS Exposure Java** | **Exercises 17.01-06** | **Date:** |
| **Name:** | | **Period:** |

1. What does *RAM* stand for?

2. What problem does RAM have?

3. The program you write is in fact a \_\_\_\_\_\_\_\_\_\_\_\_\_of another program.

4. What does *IDE* stand for?

5. Besides your IDE, list 2 other applications that use data files?

6. Can a Java program create a data file that it or another program could retrieve at a later time?

7. What is a *bit*?

8. How many *bits* are in a *byte*?

9. How many *bytes* does a character use in *ASCII*?

10. How many *bytes* does a character use in *Unicode*?

11. What is a *field*?

12. What is a *record*?

13. What is a *file*?

14. Modern languages like C++ and Java use \_\_\_\_\_\_\_\_\_\_ to handle data transfer.

15. What is a *stream*?

16. What did early storage devices use?

17. Refer to the previous question, accessing this information was only possible in what way?

18. Besides an audio tape player, give another example of a sequential-access storage device?

19. Besides a CD player, give another example of a random-access storage device?

20. What is the difference between *sequential-access* and *random-access*?

21. What does the **getname** method of the **File** class do?

22. What does the **exists** method of the **File** class do?

23. What does the **length** method of the **File** class do?

24. What does the **getAbsolutePath** method of the **File** class do?

25. What does the **canRead** method of the **File** class do?

26. What does the **CanWrite** method of the **File** class do?

27. What does the **delete** method of the **File** class do?

28. What does the **createNewFile** method of the **File** class do?

29. Name 2 classes that create objects that handle character based streams.

30. What do the **BufferedWriter** and the **BufferedReader** classes contain?

31. What is a *buffer*?

32. Look at lines #1 & #2 in program ***Java1704.java***. Rewrite these 2 lines as 1 statement.

33. What is the **FileWriter** class used for?

34. What is the **BufferedWriter** class used for?

35. What is an *anonymous* object?

36. What does the **readLine** method of the **BufferedReader** class do?

37. What does the **write** method of the **BufferedWriter** class do?

38. What does the **newLine** method of the **BufferedWriter** class do?

39. What does the **close** method of the **BufferedWriter** class do?

40. Look at lines 3 & 4 in program ***Java1708.java***. Explain the purpose of these lines.

41. Refer to the previous question. How does the computer know to stop when it is at the end of the file?

42. What is the **FileReader** class used for?

43. What is the **BufferedReader** class used for?

44. What does the **readLine** method of the **BufferedReader** class do?

45. What does the **close** method of the **BufferedReader** class do?

46. What do we need to do to store numerical data in a text file?

47. What method can be used to convert an **int** or **double** to a **String**?

48. Look at line 6 in program ***Java1709.java***.

What would be stored in textfile ***Java1709.dat*** if line 6 was removed from program ***Java1709.java***?

49. Refer to the previous question. If you made this change, what would happen if you now execute program ***Java1710.java***?

50. What method can be used to convert a **String** to an **int**?

51. What method can be used to convert a **String** to an **double**?

52. Can **FileReader** and **BufferedReader** be used for keyboard input?

53. Can the **Scanner** class be used for file input?