

Outline of Test-D (Chapters 7-12)

The test will have three questions of approximately the same weight:

1. **On Chapters 8 and 9**

Given an API of several classes involving has-a and is-a relationships, write programs or predict the output of code fragments. It would be most helpful if the API of Test-C were studied before taking Test-D.

2. **On Chapter 7 and 11**

Write an app that involves file I/O, parsing and tokenizing, and exception handling.

3. **On Chapter 10**

Write an app that involves a list or a map.

Data Sheet:

String Methods (invoke on a string s)	char charAt(int p) Returns the character at position# p in s.
int compareTo(String t) Returns a negative number if s<t, zero if s=t, and a positive number if s>t.	Static Methods
int indexOf(String t, int f) Looks for the string t within s, starting at position# f in s. Returns the position in s where the match was found. Returns -1 if no match was found.	Integer. parseInt(s) Double. parseDouble(s) methods to convert a string s that contains a number to a primitive type.
int indexOf(String t) Looks for the string t within s (as above), starting at the beginning of s.	double abs(double x) Returns the absolute value of x (Math)
String substring(int f, int t) Returns all characters in s with position numbers $\geq f$ and $< t$.	double pow(double x, double y) Returns x raised to y. (Math)
String substring(int f) Returns a substring of s that begins at f and extends to the end of s.	double rint(double a) Returns the closest double to a that is equal to a mathematical integer. (Math)
String replace(char x, char y) Returns a string with all occurrences of character x in s replaced by y.	String repeat(int count, char c) Returns a string made up of c repeated count times. (IO)
String toUpperCase/LowerCase() Returns a string of all characters in s converted to upper / lower case.	String Tokenizer Constructor: (String s, String delimiters)
String trim() Returns the same content as s but with any leading/trailing white-space	Methods: String nextToken(), boolean hasMoreTokens(), int countTokens()