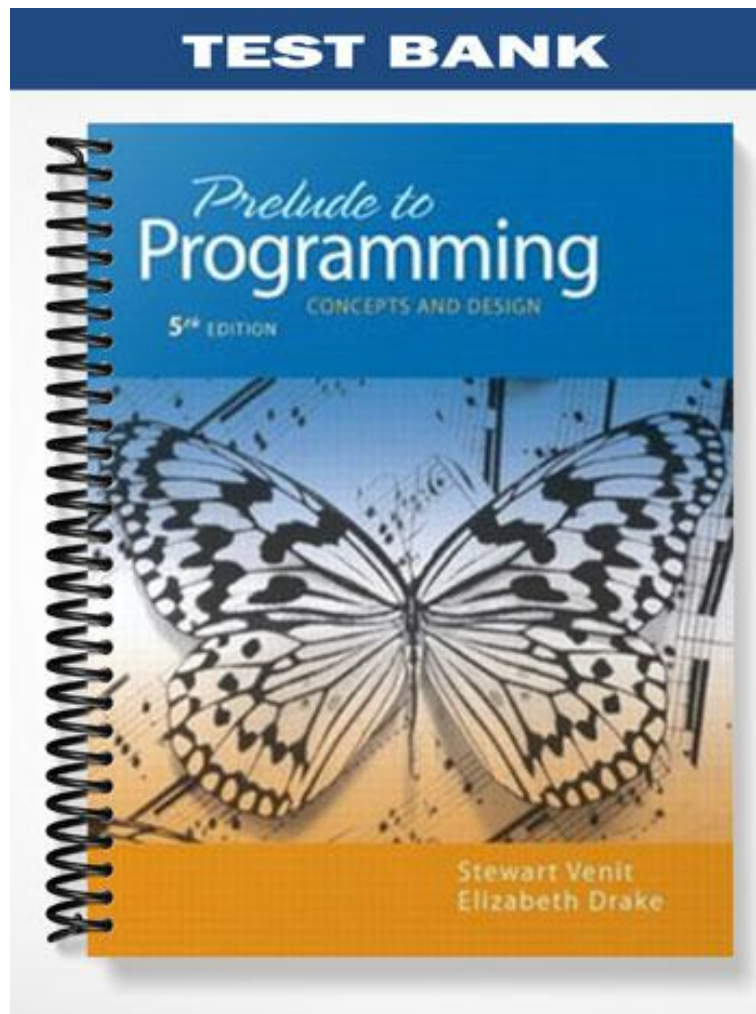


TEST BANK



Prelude to
Programming

CONCEPTS AND DESIGN

5th EDITION

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Test Bank for Prelude to Programming**Chapter 2**

MULTIPLE CHOICE

1. In the first phase of the program development cycle you should:
- make a hierarchy chart
 - identify all the variables needed
 - identify the desired results
 - identify appropriate test data

ANS: C

2. An algorithm must:
- include step-by-step instructions
 - be well defined and well ordered
 - produce some result
 - terminate in a finite time
 - all of the above are true

ANS: E

3. Which of the following is **not** part of the analysis phase of the program development cycle?
- determine the required output (the result)
 - determine the required input (the data)
 - determine the formulas needed to get the required results
 - determine the names of all the variables to be used

ANS: D

4. When a programmer breaks tasks down into smaller pieces, this is called:
- flowcharting
 - modular programming
 - the program development cycle
 - hierarchical programming

ANS: B

5. Which of the following are characteristics of a program module?
- It performs a single task
 - It is self-contained
 - It is relatively short
 - any of the above

ANS: D

6. Which of the following is not a characteristic of a program module?
- it performs a single task
 - it is self-contained and independent of other modules
 - it is relatively short
 - all of the above are characteristics of a program module

ANS: D

7. Given the following statements from a certain program:

```
Call Purchase Price module
Write "Come back soon"
```

What statement is executed immediately after the **Call** statement?

- Write "Come back soon"
- The first statement in the Purchase Price module
- Nothing is executed; this is an illegal Call
- It is impossible to tell; not enough information is given

ANS: B

8. Given the following statements from a certain program:

```
Call Purchase Price module
Write "Come back soon"
```

What statement is executed immediately after the last statement in the **Purchase Price module**?

- Write "Come back soon"
- The first statement in the Purchase Price module
- Nothing is executed; this is an illegal Call
- It is impossible to tell; not enough information is given

ANS: A

9. When a large company completes development of new software, it is tested on a wide range of computers using different peripherals. This "in-house" testing is known as:

- internal documentation
- alpha testing
- Windows testing
- beta testing

ANS: B

10. The two fundamental types of errors that can arise when coding a program are:

- logic and testing errors
- logic and syntax errors
- syntax and testing errors
- coding and testing errors

ANS: B

11. A diagram that uses special symbols to display pictorially the flow of execution of a program or program module is a(n):
- hierarchy chart
 - pseudocode listing
 - application chart
 - flowchart

ANS: D

12. Which of the following is not a flowchart symbol?

- a. 
- b. 
- c. 
- d. 

ANS: D

13. Which of the following is **not** one of the basic control structures?

- Sequence
- Modularization
- Selection
- Repetition

ANS: B

14. The type of control structure that causes a branch forward at some point, causing a portion of the program to be skipped, is:

- a sequential structure
- a repetition structure
- a selection structure
- a loop structure

ANS: C

15. Which control structure contains a branch back to a previous statement in the program module, which results in a block of statements that can be executed many times.

- a sequential structure
- a repetition structure
- a selection structure
- one of the above

ANS: B

TRUE/FALSE

1. True/False: External documentation consists of comments within a program that explain the code, step by step.
ANS: F
2. True/False: When a program is written by identifying tasks and subtasks and then writing modules to deal with each task, this is known as modular programming.
ANS: T
3. True/False: A **Call** statement transfers program control to the beginning of the submodule that is called.
ANS: T
4. True/False: Virtually every commercial program includes some form of external documentation to help customers learn to use the software.
ANS: T
5. True/False: A violation of a programming language's rules for creating valid statements is considered a logic error.
ANS: F
6. True/False: A repetition structure consists of a series of consecutive statements that are executed in the order in which they appear.
ANS: F
7. True/False: There are three basic control structures.
ANS: T
8. True/False: Loops and repetition structures are the same thing.
ANS: T
9. True/False: Variable names should be descriptive; in general, they should indicate to anyone reading the code what that variable represents.
ANS: T
10. True/False: A flowchart is a pictorial representation of the flow of a program.
ANS: T
11. True/False: If you use a flowchart to design a program, you cannot use pseudocode for the same program.
ANS: F
12. True/False: A sequential structure consists of a series of consecutive statements, executed in the order in which they appear.
ANS: T
13. True/False: Recently interactive flowcharting programs such as RAPTOR have become available.
ANS: T

14. True/False Structured programming is a method used to design and code programs in a systematic, organized manner.

ANS: T

15. True/False: A syntax error is a violation of the programming language's rules for creating valid statements.

ANS: T

SHORT ANSWER

1. A step-by-step method for solving a problem in a computer program is a(n) _____.

ANS: algorithm

2. Comments included within a program to explain parts of the code are called _____.

ANS: internal documentation

3. Every program has a(n) _____ which is where the program begins and normally ends.

ANS: main module

4. A visual way to keep track of a program's modules and the relationships between modules is to create a _____.

ANS: hierarchy chart

5. In a program, statements that are ignored (not processed) by the computer are _____.

ANS: comments

6. A programming error that results from failing to use the proper combination of statements to accomplish a certain task is a(n) _____ error.

ANS: logic

7. In a(n) _____ structure, there is a branch back to a previous statement in the program module.

ANS: loop or repetition

8. A synonym for a decision structure is a(n) _____ structure.

ANS: selection

9. In a _____ structure there is a branch forward at some point, causing a portion of the program to be skipped.

ANS: decision structure (or selection structure)

10. The elements of a program that affect its readability and ease of use are grouped together under the general heading of _____.

ANS: programming style

11. Two tools used by programmers to design programs before writing actual code are _____ and _____.

ANS: pseudocode and flowcharts

12. Most documentation prepared for the lay person to explain how to use a particular piece of software is written by a _____.

ANS: technical writer

13. After a program is coded, it must be _____.

ANS: tested

14. Use of an incorrect formula to produce a desired result is a type of _____ error.

ANS: logic

15. When you begin to analyze a problem in programming, the first thing you need to determine is the desired _____.

ANS: output