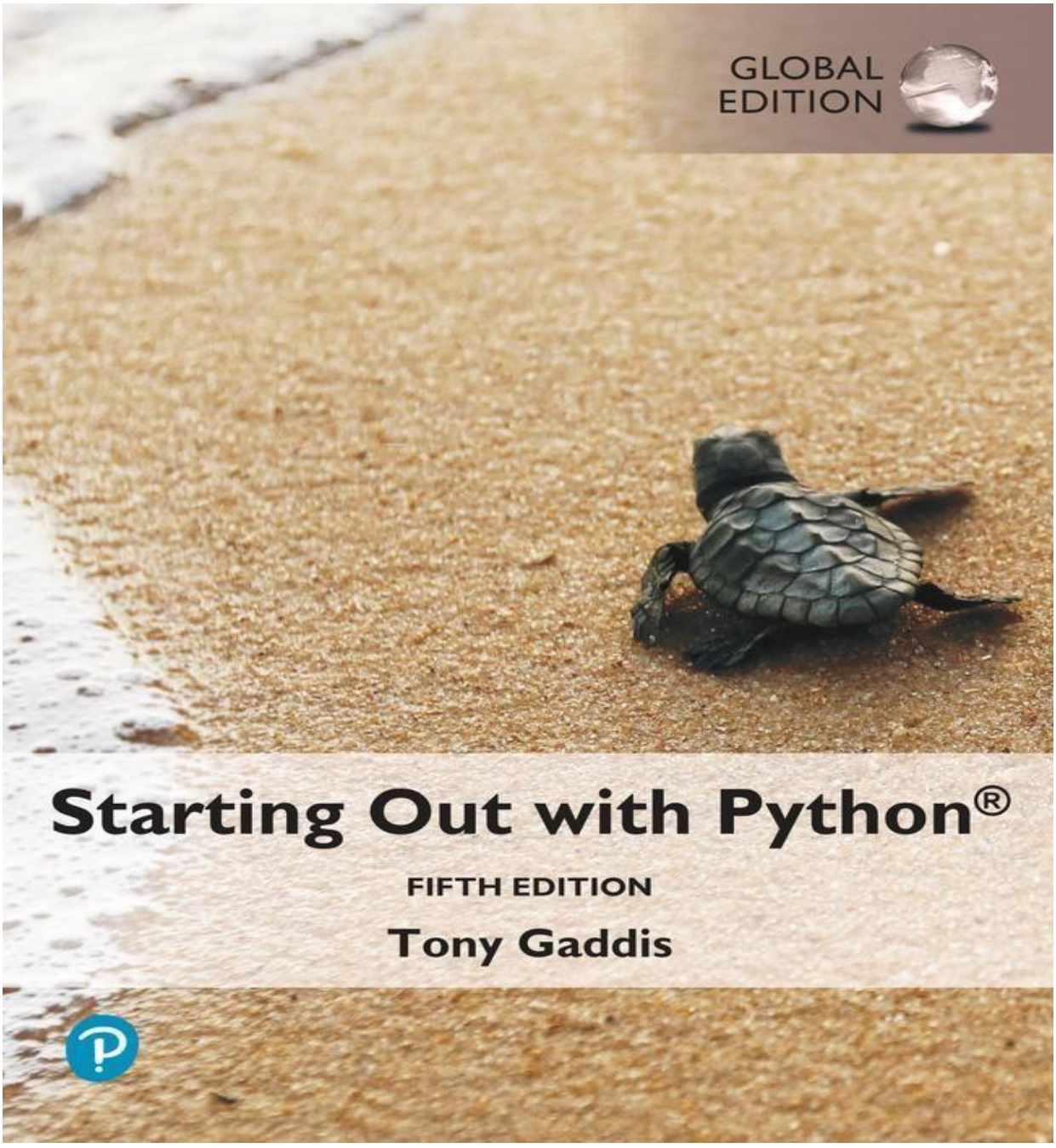
TEST BANK


GLOBAL
EDITION
Starting Out with Python®
FIFTH EDITION
Tony Gaddis

TEST BANK FOR STARTING OUT WITH PYTHON [GLOBAL EDITION] BY TONY GADDIS

Table of Contents

Chapter 1 Introduction to Computers and Programming
Review Questions
Multiple Choice

1. A(n)_____is a set of instructions that a computer follows to perform a task.
    a. Compiler
    b. Program
    c. Interpreter
    d. Programming language
2. The physical devices that a computer is made of are referred to as_____.
    a. Hardware
    b. Software
    c. The operating system
    d. Tools
3. The part of the computer that runs programs is called_____.
    a. RAM
    b. Second storage
    c. Main memory
    d. The CPU
4. Today, CPUs are small chips known as_____.
    a. ENIACs
    b. Microprocessors
    c. Memory chips
    d. Operating systems
5. The computer stores a program while the program is running, as well as the data the the program is working with, in_____.
    a. Secondary storage
    b. The CPU
    c. Main Memory
    d. The microprocessor
6. This is a volatile type of memory that is used only for temporary storage while a program is running.
    a. RAM
    b. Second storage
    c. The disk drive
    d. The usb drive
7. A type of memory that can hold data for long periods of time, even when there is no power to the computer, is called_____.
    a. RAM
    b. Main memory
    c. Second storage
    d. CPU storage

8. A component that collects data from people or other devices and sends it to the computer is called_____.
    a. An output device
    b. An input device
    c. A secondary storage device
    d. Main memory
9. A video display is a(n)_____device.
    a. Output
    b. Input
    c. Second storage
    d. Main memory
10. A_____is enough memory to store a letter of the alphabet or a small number.
    a. Byte
    b. Bit
    c. Switch
    d. Transistor
11. A byte is made up of eight_____.
    a. CPUs
    b. Instructions
    c. Variables
    d. Bits
12. In the_____numbering system, all numeric values are written in sequences of 0's and 1's.
    a. Hexadecimal
    b. Binary
    c. Octal
    d. Decimal
13. A bit that is turned off represents the following value: _____
    a. 1
    b. -1
    c. 0
    d. "No"
14. A set of 128 numeric codes that represent the English letters, various punctuation marks, and other characters is_____.
    a. Binary numbering
    b. ASCII
    c. Unicode
    d. ENIAC
15. An excessive encoding scheme that can represent characters for many languages in the world is_____.
    a. Binary numbering
    b. ASCII
    c. Unicode
    d. ENIAC

16. Negative numbers are encoded using the_____technique.
    a. Two's complement
    b. Floating point
    c. ASCII
    d. Unicode
17. Real numbers are encoded using the_____technique.
    a. Two's complement
    b. Floating point
    c. ASCII
    d. Unicode
18. The tiny dots of color that digital images are composed of are called_____.
    a. Bits
    b. Bytes
    c. Color packets
    d. Pixels
19. If you were to look at a machine language program you would see_____.
    a. Python Code
    b. A stream of binary numbers
    c. English words
    d. Circuits
20. In the_____part of the fetch-decode-execute cycle, the CPU determines which operation it should perform.
    a. Fetch
    b. Decode
    c. Execute
    d. Deconstruct
21. Computers can only execute programs that are written in_____.
    a. Java
    b. Assembly language
    c. Machine language
    d. Python
22. The_____translates an assembly language program to a machine program.
    a. Assembler
    b. Compiler
    c. Translator
    d. Interpreter
23. The words that make up a high-level programming language are called_____.
    a. Binary instructions
    b. Mnemonics
    c. Commands
    d. Key words

24. The rules that must be followed when writing a program are called _____
    a. Syntax
    b. Punctuation
    c. Key Words
    d. Operators
25. A(n)_____program translates a high-level language program into a separate machine language program.
    a. Assembler
    b. Compiler
    c. Translator
    d. utility

True or False

1. Today, CPU's are huge devices made of electrical and mechanical components such as Vacuum tubes and switches.
    a. True
    b. False
        i. CPUs were huge devices made of electrical and mechanical components such as switches and vacuum tubes, but today's CPUs are small chips often called microprocessors. (p.3)
2. Main memory is also known as RAM.
    a. True
        i. Main memory is commonly known as random-access memory, or RAM. It is called this because the CPU is able to quickly access data stored at any random location in RAM. RAM is considered a volatile type of memory that is used only for temporary storage while a program is running. When the computer is turned off, the contents of the RAM are erased. (p.5)
    b. False
3. Any piece of data that is stored in a computer's memory must be stored as a binary number.
    a. True
        i. All data that is stored in a computer is converted to a sequence of 0's and 1's. Computer scientists think of bits as tiny switches that can either be on or off. Bits aren't actual "switches" however, at least not in the normal sense. In most computer systems, bits are tiny electrical components that can hold a positive or a negative charge. Computer scientists think the positive charge is a switch in the on position, and one in the negative position as off. (p.7,8)
    b. False
4. Images, like the ones created with your digital camera, cannot be stored as binary numbers.
    a. True
    b. False
        i. Computers are often referred to as digital devices. The term digital device can be used to describe anything that uses binary numbers. Digital data is data that is stored in binary format, and a digital device is any device that works with binary data. Consider the pictures taken with a digital camera. These images are composed of tiny dots of color known as pixels. Each pixel in an image is converted to a numeric code that represents the pixel's color. The numeric code is stored in memory as a binary number. (p.12)