1. Which of the following correctly defines a character set in programming?

A) A collection of mathematical symbols used in computations
B) A set of predefined characters used for representing data
C) A group of reserved words used exclusively for programming
D) A set of instructions for manipulating strings

Answer: B) A set of predefined characters used for representing data

Explanation: In programming, a character set refers to a predefined set of characters (such as letters, digits, and symbols) that can be used for representing data in a program.

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2. What is the purpose of constants in programming?

A) To store values that can be modified during runtime
B) To represent fixed values that do not change during program execution
C) To define variable data types
D) To perform arithmetic operations

Answer: B) To represent fixed values that do not change during program execution

Explanation: Constants in programming are used to represent fixed values that do not change during the execution of a program. They provide a way to make code more readable and maintainable by assigning meaningful names to these fixed values.

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3. Which of the following is NOT a valid variable name in most programming languages?

A) my_variable
B) 123variable
C) variable123
D) _variable

Answer: B) 123variable

Explanation: Variable names in most programming languages cannot start with a number. They typically must start with a letter or an underscore.

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4. What do keywords represent in programming languages?

A) Variables that hold constant values
B) Reserved words with predefined meanings
C) Identifiers used for naming variables
D) Data types used for declaring constants

Answer: B) Reserved words with predefined meanings

Explanation: Keywords are reserved words in a programming language that have predefined

meanings and cannot be used as identifiers for variables or other user-defined entities.

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5. Which of the following is an example of a literal in programming?

A) x = 5;
B) y = “Hello”;
C) z = True;
D) All of the above

Answer: D) All of the above

Explanation: A literal in programming represents a fixed value that appears directly in the source code. It can be a number (integer or floating-point), string, or boolean value.

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6. In programming, what is the purpose of a type declaration instruction?

A) To assign values to variables
B) To declare the data type of a variable
C) To perform arithmetic operations
D) To define constants

Answer: B) To declare the data type of a variable

Explanation: A type declaration instruction is used to specify the data type of a variable in programming. It helps the compiler or interpreter understand how the variable should be stored and interpreted in memory.

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7. Which storage class specifies that a variable is accessible only within the block in which it is declared?

A) auto
B) static
C) extern
D) register

Answer: A) auto

Explanation: The “auto” storage class in programming languages specifies that a variable is accessible only within the block in which it is declared. It is the default storage class for local variables.

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8. What is the purpose of type conversion in programming?

A) To change the data type of a variable
B) To perform arithmetic operations

C) To declare constants
D) To define keywords

Answer: A) To change the data type of a variable

Explanation: Type conversion, also known as typecasting, is the process of converting a value from one data type to another. It allows for compatibility between different data types in expressions or assignments.

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9. Which of the following arithmetic operations has the highest precedence in the hierarchy of operations?

A) Addition
B) Multiplication
C) Division
D) Exponentiation

Answer: D) Exponentiation

Explanation: In the hierarchy of operations, exponentiation (raising to a power) has the highest precedence, followed by multiplication and division, and then addition and subtraction.

10. What does the term “unsigned” indicate in programming?

A) It indicates a variable that can only hold positive values.
B) It indicates a variable that can hold both positive and negative values.
C) It indicates a variable with a floating-point data type.
D) It indicates a variable that cannot be modified.

Answer: A) It indicates a variable that can only hold positive values.

Explanation: In programming, “unsigned” is used to specify that a variable can only hold non-negative values (i.e., positive values or zero). It is often used with integer data types.