

COMPUTER STUDY TOOL

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NAME THE FOLLOWING

1. Name a complete object-oriented programming language

Answer: JAVA

2. Who developed JAVA

Answer: James Gosling

3. Name the translator used in JAVA

Answer: Compiler, Interpreter

4. Other name of Translator

Answer: Language Processor

5. Name the interpreter used in Java

Answer: JVM

6. What is the environment used in BlueJ

Answer:

Integrated Development Environment

7. Name the tools used in an IDE

Answer: Editor, Debugger, Viewer

8. Datatype for an escape sequence

Answer: char

9. Any 2 library functions

Answer: pow, sqrt

10. Datatype for astronomical data

Answer: double

11. What do you get after compiling a Source code

Answer: Byte code

12. Name the character set used in JAVA

Answer: Unicode (2 bytes)

ANSWER THE FOLLOWING

1. What are the features of JAVA ?

Answer:

- i) Compiled and Interpreted language
- ii) Object Oriented Programming language
- iii) Robust and secure
- iv) High performance
- v) Dynamic and extensible
- vi) Distributed
- vii) It's platform independent

(If you write once you can use anywhere- WRITE ONCE USE ANYWHERE)

2. What is a byte code?

Answer:

Source program is converted by the compiler into byte code. Byte code is not machine language instruction but contains binary digits (intermediate code). Character set is a set of valid characters that a language can recognise, a character represents by letter, digit or any other sign JAVA uses unicode character set Unicode is a 2 byte or 16 bit character set, that has characters representing almost all characters, alphabets and writing systems around the world. The first 128 characters in the unicode character set are identical to ASCII CHARACTER SET. There are 65.536 characters in the unicode set.

3. Write the advantages of Method

Answer:

- (a) Reusability of the code
- (b) Reduce the complexity of the program
- (c) Debugging becomes casier
- (d) Reduce the overall length of the program
- (e) Easy to understand

POINTS TO REMEMBER

- Switch statement always checks equality and it cannot perform task on relational and logical expression
- The case constant shouldn't be a floating point constant
- While and for loop are entry controlled loops, because if the text expression evaluates to be true, then only the body of the loop is executed. The number of iterations are unknown.

FALL THROUGH

In a program, if there is no break statement, applied at the end of a case, then the control enters into the next case statement for execution.

CONTINUE

Is a jump statement in JAVA, when a continue statement is encountered, the control of the program goes to the next iteration by skipping the remaining part of the body of the loop .That means it stops the current iteration and goes for the next iteration.

- do-while loop is an exit controlled loop because the body of the loop executes at least once before checking the test expression. Number of iterations is unknown
- In a program with units of electricity/distance, don't take per extra unit

[TO CONVERT IF LOOP TO SWITCH CASE]

➤ if

```
if (ch='M' || ch='m')
System.out.println("JAVA:);
```

➤ switch

```
char ch= sc.next().charAt(0);
switch(ch)
    { case 'M':
      case 'm': System.out.println("JAVA");
                break;
    }
```

➤ For patterns like; USE TWO NESTED LOOPS

```
123      OR   3 2 1 0 1 2 3
12
1
12
123
```

ASCII (AMERICAN STANDARD CODE for INFORMATION and INTERCHANGE) VALUES

A to Z: 65 to 90

a to z: 97 to 112

0 to 9: 48 to 57

Convert A to a: +32

Convert a to A:-32

ASCII value for space ' ' : 32

Space ' ' for lastIndexOf() : 0