1. Identify the incorrect statement about compilation and execution of java programs

Answers

1. javac helps in compiling the java program and creates the .class files

2. java runs the programs using the bytecode in .class files

3. java runs the programs using the source code in .java files

4. javac is in the JDK package and java is in the JRE package

2. What command is used to save the standard output in a file, as well as display it on the terminal?

Answers

1. tee

2. grep

3. cat

4. more

3. Which command is used to change the I/O characteristics of the terminal?

Answers

1. ctty

2. ptty

3. stty

4. tty

4. Which Linux command list the content of all sub directory?

Answers

1. ls ~

2. ls * /

3. ls /

4. ls ../

5. What will be the output of the following Java code?
```
1.    class array_output
2.    {
3.        public static void main(String args[])
4.        {
5.          int array_variable[][] = {{ 1, 2, 3}, { 4 , 5, 6}, { 7, 8, 9}};
6.            int sum = 0;
7.            for (int i = 0; i < 3; ++i)
8.                for (int j = 0; j <  3 ; ++j)
9.                    sum = sum + array_variable[i][j];
10.            System.out.print(sum / 5);
11.        }
12.    }
```

Answers

1. 8

2. 9

3. 10

4. 11

6. How many constructors in the String class?

Answers

1. 1

2. 2

3. 13

4. 11

7. What will be the output of below statements?

```
String s = "Java String Quiz"; System.out.println(s.charAt(s.toUpperCase().length()));
```

Answers

1. Convert "Z" to int 90 and prints "90"

2. Runtime Exception

3. Prints "z"

4. Prints "Z"

8. What will be the output of the following class?

```
class C
 {
 public static void main(String[] args)
 {
 String s1 = "Hello";
 String s2="India";
 String s3=s1+s2;
 String s4=s1.concat(s2);
 System.out.println(s3==s4);
 System.out.println(s3.equals(s4));
}
}
```

Answers

1. true, true

2. true, false

3. false, true

4. false, false

9. Which component is responsible for optimizing byte-codes?

Answers

1. JVM

2. JDK

3. JIT

4. JRE

10. Which of these cannot be declared static?

Answers

1. class

2. object

3. variable

4. method

11. Which of the following statements are incorrect?

Answers

1. static methods can call other static methods only

2. static methods must only access static data

3. static methods can not refer to this or super in any way

4. when object of class is declared, each object contains its own copy of static variables

12. What will be the output of the following Java program?

```
1.      class access
2.      {
3.          public int x;
4.           static int y;
5.          void cal(int a, int b)
6.          {
7.              x +=  a ;
8.              y +=  b;
9.          }
10.      }
11.      class static_specifier
12.      {
13.          public static void main(String args[])
14.          {
15.              access obj1 = new access();
16.              access obj2 = new access();
17.              obj1.x = 0;
18.              obj1.y = 0;
19.              obj1.cal(1, 2);
20.              obj2.x = 0;
21.              obj2.cal(2, 3);
22.              System.out.println(obj1.x + " " + obj2.y);
23.          }
24.      }
```

Answers

1. 1 2

2. 2 3

3. 3 2

4. 1 5

13. When invoking a method with an object argument, _____ is passed.

Answers

1. Athe contents of the object

2. a copy of the object

3. the reference of the object

4. the object is copied, then the reference of the copied object

14. Choose the correct answer.

Answers

1. Recursion is always better than iteration.

2. Recursion uses more memory compared to iteration.

3. Recursion uses less memory compared to iteration.

4. Iterative function is always better and simpler to write than recursion.

15. What will be the output of the following program?

```java
class RecursiveFor
{
    public static void main(String[] args)
    {
        int out = 15;
        for (int i = 4; i < 6; i++)
        {
            for (int j = 7; j >= 5; j--)
            {
                if (i == j) continue;
                if (i > j)
                {
                    out += main(i, j);
                }
                else
                {
                    out += main(j, i);
                }
            }
        }
        System.out.println("out = " + out);
    }


    private static int main(int a, int b)
    {
        if (a + b == 0)
        {
            return 2;
        }
        return a + main(a - 1, b);
    }
}
```

Answers

1. out = 78

2. out = 100

3. out = 80

4. Compilation Error

16. What is the right output of this program ?

```java
public class BitwiseNotOperator{
   public static void main(String[] args)
     {

       int i = 50;
       System.out.print(~i);
       System.out.print(",");
       System.out.print(~--i);
       System.out.print(",");
       System.out.print(~++i);
   }
}
```

Answers

1. -50,-49,-50

2. -51,-51,-52

3. -49,-50,-51

4. -51,-50,-51

17. The operating system and the other processes are protected from being modified by an already running process because _____

Answers

1. They are in different memory spaces

2. They are in different logical addresses

3. They have a protection algorithm

4. Every address generated by the CPU is being checked against the relocation and   limit registers

18. Where are placed the list of processes that are prepared to be executed and waiting?

Answers

1. Job queue

2. Ready queue

3. Execution queue

4. Process queue

19. By shell into the parameter, __ reads the first argument

Answers

1. $1

2. $3

3. $$

4. 1$

20. The program is interrupted by_____ command in appropriate way.

Answers

1. kill

2. SIGKILL

3. trap

4. INT

21. Which system call can be used by a parent process to determine the termination of child process?

Answers

1. wait()

2. exit()

3. fork()

4. get()

22. The entry of all the PCBs of the current processes is in _____

Answers

1. Process Register

2. Program Counter

3. Process Table

4. Process Unit

23. If one thread opens a file with read privileges then:

Answers

1. other threads in the another process can also read from that file

2. other threads in the same process can also read from that file

3. any other thread can not read from that file

4. all of the mentioned

25. In Process Address Space, The variable names, constants, and instruction labels are the basic elements of _____.

Answers

1. Symbolic addresses

2. Relative addresses

3. Physical addresses

4. None of the above

26. In which type of Fragmentation, Memory block assigned to process is bigger. Some portion of memory is left unused, as it cannot be used by another process.

Answers

1. External fragmentation

2. Internal fragmentation

3. Both of the above

4. None of the above

27. A swapper manipulates _____ whereas the pager is concerned with individual _____ of a process.

Answers

1. the entire process, parts

2. all the pages of a process, segments

3. the entire process, pages

4. none of the mentioned

28. Segment replacement algorithms are more complex than page replacement algorithms because _____

Answers

1. Segments are better than pages

2. Pages are better than segments

3. Segments have variable sizes

4. Segments have fixed sizes

29. Command used to check shared memory is

Answers

1. ipcs

2. ipcs -mS

3. ipcs -s

4. ipcs -q

31. Which of the following are the major disadvantages of requesting all resources while preventing deadlock?
i) delay process initiation
ii) future resources requirements must be known
iii) subject to cyclic restart

Answers

1. i and ii only

2. ii and iii only

3. i and iii only

4. i, ii and iii

32. Which of the following are the thread synchronization primitives supported by Solaris
   i) Mutual exclusion
  ii) Semaphores
 iii) Signals
  iv) Condition variables

33. In which of the following Algorithm where the reference bit is used to determine whether a page has been recently referenced, and some page that has not been recently

Answers

1. LRU Page replacement Algorithm

2. FIFO page replacement Algorithm

3. Optimal page replacement algorithm

4. NRU Page replacement algorithm

34. In which of the following Page replacement Policy, at every page fault the page replacement policy replaces the page that was loaded into memory earlier than any othe

Answers

1. LRU Page replacement Algorithm

2. FIFO page replacement Algorithm

3. Optimal page replacement algorithm

4. NRU Page replacement algorithm

35. In UNIX, the set of masked signals can be set or cleared using the _____ function.

Answers

1. sigprocmask

2. sigmask

3. sigmaskproc

4. sigproc

36. In most cases, if a process is sent a signal while it is executing a system call :

Answers

1. the system call will continue execution and the signal will be ignored completely

2. the system call is interrupted by the signal, and the signal handler comes in

3. the signal has no effect until the system call completes

4. none of the mentioned

37. Both processes (the parent and the child) continue execution at the instruction after the fork(), with one difference: the return code for the fork() is _____ for th

Answers

1. Negative integer, Zero

2. Zero, Negative integer

3. Nonzero integer, Zero

4. Zero, nonzero integer

38. When the operating system has performed a_____ operation, it has two choices for selecting a process either admitting a newly created process or bring in a previously

Answers

1. Swapping-in

2. Swapping-out

3. Blocked-in

4. Blocked-out

39. There are the following statements that are given below, which of them are correct about Regular expressions in the Linux operating system?

A. The regular expressions are strings that are used for pattern matching in some Linux commands.

B. The regular expressions are also known as a regex.

C. The regular expressions use some characters that each has a different meaning.

D. Regular expressions can only be used in the Linux commands.

Answers

1. A and B

2. C and D

3. A, B, and C

4. A, B, C, and D

40. Which of the following command is used to display only directories that exist in the current directory?

Answers

1. ls -l | grep "^d"

2. ls | grep "^d"

3. ls -l | grep "#d"

4. ls -l | grep "*d"