



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Loops	Last updated on	22 August 2025

1. Which of the following is not a type of loop in Java?

- a. while
- b. do-while
- c. enhanced for
- d. Switch

Ans: d. Switch

Explanation: Java supports while, do-while, for, and enhanced for loops. Switch is a selection statement in Java.

2. What is the main drawback of printing * 3 times using `System.out.println("*");` repeatedly?

- a. It's faster than loops
- b. It uses less memory
- c. It increases code length and redundancy
- d. It is a standard practice

Ans: c. It increases code length and redundancy

Explanation: Repeating `System.out.println` manually is inefficient for many iterations; loops reduce repetition.

3. Why are loops used in Java?

- a. To create functions
- b. To reduce runtime
- c. To repeat a block of code until a condition is met
- d. To manage variables

Ans: c. To repeat a block of code until a condition is met

Explanation: Loops help execute the same block of code multiple times as long as a specified condition holds true.



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Loops	Last updated on	22 August 2025

4. How can we efficiently print a sentence one million times in Java?

- a. By using if-else
- b. By copy-pasting print statements
- c. By using a loop
- d. By recursion only

Ans: c. By using a loop

Explanation: Loops are specifically designed to handle repetitive tasks like printing large outputs efficiently.

5. Where is the test condition checked in a while loop?

- a. After loop execution
- b. At the middle
- c. At the entry/beginning
- d. Randomly

Ans: c. At the entry/beginning

Explanation: Java's while loop checks the condition before entering the loop block, making it an entry-controlled loop.

6. Which of the following is the correct syntax of a while loop?

- a. while (condition);
- b. while condition {}
- c. while (condition) { // body }
- d. do while(condition)

Ans: c. while (condition) { // body }

Explanation: This is the correct syntax format for a while loop in Java.



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Loops	Last updated on	22 August 2025

7. What happens if the test expression of a while loop evaluates to false initially?

- a. Executes once
- b. Loop runs infinitely
- c. Loop is skipped
- d. Throws an error

Ans: c. Loop is skipped

Explanation: If the test condition is false initially, the loop body is not executed at all.

8. Which statement best describes the while loop?

- a. Executes only once
- b. Executes until the variable is null
- c. Executes statements repeatedly while a condition is true
- d. Executes after evaluating the loop body

Ans: c. Executes statements repeatedly while a condition is true

Explanation: The loop keeps executing as long as the condition remains true.

9. What is the output of the loop `int i=1; while(i<=5){System.out.print("* "); i++;}`?

- a. *****
- b. * * * * *
- c. *
- d. Syntax error

Ans: b. * * * * *

Explanation: The loop prints * followed by a space five times.



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Loops	Last updated on	22 August 2025

10. What are the key components of a while loop?

- a. Entry, test, switch
- b. Start, middle, end
- c. Initialization, condition, iteration
- d. Declaration, exit, case

Ans: c. Initialization, condition, iteration

Explanation: These are necessary for the correct working of a while loop.

11. How many times will the following loop execute?

```
int i=0;
while(i<5){
    System.out.print("*");
    i=i+1;
}
```

- a. 4 times
- b. 5 times
- c. 6 times
- d. Infinite times

Ans: b. 5 times

Explanation: The Loop runs while $i < 5$. Since i starts at 0 and increments by 1, it runs 5 times (0 to 4).



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Loops	Last updated on	22 August 2025

12. Which statement will produce five * symbols each on a new line using a while loop?

- a. `SOUT("*");`
- b. `System.out.println("*");`
- c. `printf("* ");`
- d. `print("* ");`

Ans: b. `System.out.println("*");`

Explanation: `System.out.println()` moves the cursor to a new line after each print.

13. What is the first output of this loop?

```
int i=0;
while(i<5){
    System.out.println(i + " ");
    i=i+1;
}
```

- a. 0
- b. 1
- c. 0 1
- d. 5

Ans: a. 0

Explanation: i starts at 0 and is printed before being incremented.



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Loops	Last updated on	22 August 2025

14. Which loop correctly prints numbers from 11 to 20?

- a. `while(i>=11) { System.out.println(i); i++; }`
- b. `while(i==11) { System.out.println(i); i++; }`
- c. `while(i<=20) { System.out.println(i); i++; }`
- d. `while(i<10) { System.out.println(i); i++; }`

Ans: c. `while(i<=20) { System.out.println(i); i++; }`

Explanation: To print 11 through 20, the condition must allow values from 11 up to 20.

15. What is the output of the following loop?

```
int i=5;
while(i>=1){
    System.out.print(i + " ");
    i--;
}
```

- a. 5 4 3 2 1
- b. 1 2 3 4 5
- c. 0 1 2 3 4 5
- d. Infinite loop

Ans: a. 5 4 3 2 1

Explanation: The loop decrements i from 5 to 1.



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Loops	Last updated on	22 August 2025

16. Which of the following will print both ascending and descending numbers from 1 to 5 and 5 to 1?

- a. Single while loop
- b. Two nested loops
- c. Two separate while loops
- d. if-else block

Ans: c. Two separate while loops

Explanation: Separate loops handle incrementing and decrementing operations individually.

17. What is the output of this code?

```
int i=0;
while(i<=10){
    System.out.print(i+" ");
    i=i+2;
}
```

- a. 1 3 5 7 9
- b. 0 2 4 6 8 10
- c. 2 4 6 8 10 12
- d. 1 2 3 4 5

Ans: b. 0 2 4 6 8 10

Explanation: The i starts at 0 and increments by 2 up to 10.



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Loops	Last updated on	22 August 2025

18. Which code uses the modulus operator to print odd numbers?

- a. `if(i%2==0)`
- b. `if(i/2==1)`
- c. `if(i%2!=0)`
- d. `if(i!=2)`

Ans: c. `if(i%2!=0)`

Explanation: Odd numbers are those where $i \% 2 \neq 0$.

19. Why does the variable n increase independently of i in this loop?

```
int i=1;
int n=11;
while(i<=10){
    System.out.print(n++ + " ");
    i++;
}
```

- a. n is not incremented
- b. n++ has no effect
- c. n is independent of i and controls the printed value
- d. n is part of the loop condition

Ans: c. n is independent of i and controls the printed value

Explanation: Here, n++ is printed, while i simply controls the loop count.



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Loops	Last updated on	22 August 2025

20. What does this loop print?

```
int i=1;
int n=5;
while(i<=10){
    System.out.println(n + " X " + i + " = " + n*i);
    i++;
}
```

- a. Square of numbers
- b. Table of 5
- c. Infinite loop
- d. Syntax error

Ans: b. Table of 5

Explanation: This prints multiplication results from 5×1 to 5×10.

21. What is the final value of the sum after executing this code?

```
int i=1;
int sum=0;
while(i<=10){
    sum=sum+i;
    i++;
}
```

- a. 45
- b. 50
- c. 55
- d. 60

Ans: c. 55

Explanation: The sum of the first 10 natural numbers is 55 (1+2+...+10).



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Loops	Last updated on	22 August 2025

22. What is the sum of odd numbers from 1 to 10?

- a. 20
- b. 25
- c. 30
- d. 35

Ans: b. 25

Explanation: Odd numbers: $1+3+5+7+9 = 25$.

23. When does an infinite while loop occur?

- a. When the condition is false
- b. When the condition is true once
- c. When the condition is never false
- d. When the loop has no body

Ans: c. When the condition is never false

Explanation: If the condition always evaluates to true, the loop runs forever.

24. What type of loop is do-while in Java?

- a. Entry-controlled
- b. Exit-controlled
- c. Infinite
- d. Static

Ans: b. Exit-controlled

Explanation: The do-while loop checks the condition after executing the loop body, making it exit-controlled.



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Loops	Last updated on	22 August 2025

25. How many times does a do-while loop execute at a minimum?

- a. 0
- b. 1
- c. 2
- d. Until true

Ans: b. 1

Explanation: The do-while loop executes the loop body at least once, regardless of the condition.

26. Where is the condition placed in a do-while loop?

- a. Before the loop
- b. In the loop body
- c. After the loop
- d. Inside brackets

Ans: c. After loop

Explanation: In do-while, the condition is checked after the loop body executes.

27. What type of loop is shown in this code?

```
int i=1;  
while(i<=5){ System.out.println(i); i++; }
```

- a. do-while
- b. while
- c. for
- d. nested

Ans: b. while

Explanation: It uses while, which checks the condition before executing the loop body.



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Loops	Last updated on	22 August 2025

28. Which loop guarantees output even if the condition is false?

- a. while
- b. if
- c. do-while
- d. for

Ans: c. do-while

Explanation: do-while executes the body first, then checks the condition.

29. When is the condition checked in a do-while loop?

- a. Before the loop starts
- b. Midway in the loop
- c. After the loop body
- d. Never

Ans: c. After the loop body

Explanation: This is the core property of a do-while loop.

30. Which loop will run even if the initial condition is false?

- a. while
- b. for
- c. do-while
- d. none

Ans: c. do-while

Explanation: The do-while loop runs once before checking the condition.



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Loops	Last updated on	22 August 2025

31. What is the purpose of choice `< 1 || choice > 5` in the do-while menu loop?

- a. Exit loop
- b. Validate input
- c. Increment value
- d. Perform the calculation

Ans: b. Validate input

Explanation: The loop repeats until a valid menu choice (1–5) is made.

32. Which is the correct structure of a for loop in Java?

- a. `for(condition; step; init)`
- b. `for(init; condition; step)`
- c. `for(step; init; condition)`
- d. `for(init; step; condition)`

Ans: b. for(init; condition; step)

Explanation: This is the proper syntax for Java's for loop.

33. What part of the for loop controls when it stops?

- a. Initialization
- b. Step
- c. Condition
- d. Body

Ans: c. Condition

Explanation: The loop continues only while the condition is true.



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Loops	Last updated on	22 August 2025

34. What is the output of `for(i=5; i>=1; i--)`?

- a. 1 to 5
- b. 5 to 1
- c. 0 to 5
- d. Infinite

Ans: b. 5 to 1

Explanation: It decrements `i` and prints from 5 to 1.

35. What is printed by `for(int i=0; i<10; i++)`?

- a. 0-9
- b. 1-10
- c. 0-10
- d. 1-9

Ans: a. 0-9

Explanation: The Loop starts at 0 and stops before 10.

36. What does `for(i=0; i<=10; i=i+2)` print?

- a. Even
- b. Odd
- c. Prime
- d. None

Ans: a. Even

Explanation: It prints even numbers up to 10.



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Loops	Last updated on	22 August 2025

37. Which loop type can be used interchangeably with for?

- a. switch
- b. if
- c. while
- d. do

Ans: c. while

Explanation: A for loop can be rewritten as a while loop.

38. What happens if you omit braces after a for loop?

- a. Syntax error
- b. Only one statement runs
- c. All run
- d. Loop fails

Ans: b. Only one statement runs

Explanation: Without {}, only the next immediate line is looped.

39. What if the increment is placed outside the loop header?

- a. Runs once
- b. No increment
- c. Must use manual increment inside
- d. Infinite

Ans: c. Must use manual increment inside

Explanation: If not in the header, the increment must be written in the loop body.



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Loops	Last updated on	22 August 2025

40. What is the result of `for(;;)`?

- a. Error
- b. One run
- c. Infinite loop
- d. Terminates early

Ans: c. Infinite loop

Explanation: All parts are optional; no condition = loop never ends.

41. What is true about multiple variables in a for loop?

- a. All must be initialized outside
- b. They must be of different types
- c. All must be the same type
- d. Can't be declared

Ans: c. All must be the same type

Explanation: Java allows multiple variables if they're of the same type.

42. What happens in `for(i=1,j=20; i<=10 && j>=20; i++,j++)`?

- a. Only i is used
- b. Loop depends on both
- c. No output
- d. j ignored

Ans: b. Loop depends on both

Explanation: Both conditions must be true for the loop to run.



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Loops	Last updated on	22 August 2025

43. Which loop type is equivalent to for(;;)?

- a. while(false)
- b. while(true)
- c. do(false)
- d. None

Ans: b. while(true)

Explanation: An Infinite for loop acts like while(true).

44. Why is while(1) invalid in Java?

- a. Infinite
- b. Not supported
- c. Integer in a boolean test
- d. Syntax error

Ans: c. Integer in a boolean test

Explanation: Java requires boolean expressions for conditions.

45. What is the while equivalent of for(i=0,j=5; i<=5&& j>=1; i++,j--)?

- a. Not possible
- b. Use recursion
- c. Use two while loops
- d. Use a compound condition in one while

Ans: d. Use a compound condition in one while

Explanation: A single while can simulate a multi-variable for loop.



Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Loops	Last updated on	22 August 2025

46. What is the main use of the for-each loop?

- a. Strings
- b. Arrays
- c. Files
- d. Threads

Ans: b. Arrays

Explanation: for-each is commonly used to iterate over arrays and collections.

47. What does the variable in for(type var: array) represent?

- a. Index
- b. Last element
- c. Each element
- d. Size

Ans: c. Each element

Explanation: It stores each value from the array during iteration.

48. What will this code print?

```
int[] numbers = {10, 20, 30};  
for(int x : numbers){  
    System.out.print(x+",");  
}
```

- a. 10,20,30
- b. 30,20,10
- c. 10-30
- d. 0,1,2

Ans: a. 10,20,30

Explanation: for-each iterates in array order.



Selvam College of Technology



An Autonomous Institution

Accredited by NAAC with "A" Grade, UGC Recognized 2(f) Status,
An ISO 9001:2015 Certified Institution, Approved by AICTE New Delhi, Affiliated to Anna University-Chennai
PONNUSAMY NAGAR, SALEM ROAD(NH-44), NAMAKKAL-637003. TAMILNADU.
Mobile: 9942099122, 9942099109, Web: www.selvamtech.edu.in

Name of the Bundle	Advanced Bundle V1	Subject	Java Programming V1
Topic	Loops	Last updated on	22 August 2025

49. What does this code do?

```
String[] names = {"Tom", "Lacy"};
for(String name : names){
    System.out.print(name+",");
}
```

- a. Prints indices
- b. Skips last
- c. Prints values
- d. Error

Ans: c. Prints values

Explanation: for-each prints each element in the array.