

# IT Skill Test GIC Myanmar

Duration: 30 Minutes

Total Questions: 8

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1. You are developing a program to process a large dataset of customer orders. Each order contains multiple items, and you need to calculate the total price for each order. Which looping construct would be most appropriate for this scenario?  
A. `for (int i = 0; i < orders.size(); i++) { ... }`  
B. `while (orders.hasNext()) { ... }`  
C. `do { ... } while (orders.hasNext());`  
D. `orders.forEach(order -> { ... });`
  2. You are developing a text processing application that needs to remove all whitespace characters from the beginning and end of each line in a multi-line string. The processing should stop when an empty line is encountered. Which looping construct would be most efficient for this task?  
A. `for (String line : lines) { ... }`  
B. `while (!line.isEmpty()) { ... }`  
C. `do { ... } while (!line.trim().isEmpty());`  
D. `for (int i = 0; i < lines.length; i++) { ... }`
  3. You're implementing a retry mechanism for an API call that might fail due to network issues. The call should be retried up to 5 times with increasing delays between attempts. Which looping construct is most suitable?  
A. `for (int i = 0; i < 5; i++) { ... }`  
B. `while (retryCount < 5) { ... }`  
C. `do { ... } while (retryCount < 5);`  
D. `IntStream.range(0, 5).forEach(i -> { ... });`
  4. You're developing a game where a character moves through a 2D grid. The character should continue moving until it reaches the edge of the grid or encounters an obstacle. Which looping construct would you use?  
A. `for (int steps = 0; steps < maxSteps; steps++) { ... }`  
B. `while (!reachedEdge && !hitObstacle) { ... }`  
C. `do { ... } while (canMove);`  
D. `grid.stream().forEach(cell -> { ... });`

5. You're implementing a binary search algorithm on a sorted array. Which looping construct would be most appropriate?
- A. `for (int i = 0; i < array.length; i++) { ... }`
  - B. `while (low <= high) { ... }`
  - C. `do { ... } while (low < high);`
  - D. `Arrays.stream(array).forEach(element -> { ... });`
6. You're writing a method to validate user input. The user should be prompted to enter a value until a valid input is provided. Which looping construct is most suitable?
- A. `for (;;) { ... }`
  - B. `while (!isValidInput) { ... }`
  - C. `do { ... } while (!isValidInput);`
  - D. `Stream.generate(() -> getUserInput()).forEach(input -> { ... });`
7. You're implementing a method to process a linked list of tasks. Each task might generate new tasks that should be added to the end of the list. Which looping construct would you use?
- A. `for (Task task : tasks) { ... }`
  - B. `while (!tasks.isEmpty()) { ... }`
  - C. `do { ... } while (!tasks.isEmpty());`
  - D. `tasks.forEach(task -> { ... });`
8. You're developing a method to calculate the factorial of a number. Which looping construct would be most efficient and readable?
- A. `for (int i = 1; i <= n; i++) { ... }`
  - B. `while (n > 1) { ... }`
  - C. `do { ... } while (n > 1);`
  - D. `IntStream.rangeClosed(1, n).reduce(1, (a, b) -> a * b);`