

Iterative Statements

Workbook

Answer the following

1. How many times the condition is checked in the below code

```

1 class SampleCode1 {
2     public static void main(String[] args) {
3         int i = 0;
4         while (i < 5) {
5             i++;
6         }
7     }
8 }

```

2. What is the output of the below code

```

1 class SampleCode2 {
2     public static void main(String[] args) {
3         int x = 3, y = 2;
4         while (x + y < 10) {
5             System.out.println(x + y);
6             x++;
7         }
8     }
9 }

```

3. What is the output of the below code

```

1 class SampleCode3 {
2     public static void main(String[] args) {
3         int i = 0, j = 0;
4         while (i < 5 && j < 10) {
5             i++;
6             j += 3;
7         }

```

```

8         System.out.println(i + " " + j);
9     }
10 }

```

4. How many times is the phrase “In the loop” prints?

```

1 class SampleCode4 {
2     public static void main(String[] args) {
3         int a = 6;
4         int b = 12;
5         while (a < b) {
6             System.out.println("In the loop");
7             a += 2;
8             b -= 2;
9         }
10    }
11 }

```

5. What is the output of the below code

```

1 class SampleCode5 {
2     public static void main(String[] args) {
3         int x = 2, y = 2;
4         while (x <= 5 && y <= 3) {
5             System.out.println(++x + " " + ++y);
6         }
7     }
8 }

```

6. The following program is intended to compute $5! = 120$, but it prints 24 instead. Find out the error in the program?

```

1 class SampleCode6 {
2     public static void main(String[] args) {
3         int num = 5;

```

```

4      int total = 1;
5      while (num > 1) {
6          total *= --num;
7      }
8      System.out.println(total);
9  }
10 }
```

7. What would be the output of the below code

```

1  class SampleCode7 {
2      public static void main(String[] args) {
3          int i = 0;
4          while (i < 10) {
5              i++;
6              System.out.println("hi");
7          }
8          while (i < 8) {
9              i++;
10         }
11         System.out.println("hello");
12     }
13 }
```

8. What would be the output of the below code when executed
java SampleCode8 4525

```

1  class SampleCode8 {
2      public static void main(String[] args) {
3          int num = Integer.parseInt(args[0]);
4          int count = 0;
5          while (num != 0) {
6              num /= 10;
7              ++count;
8          }
9          System.out.println(count);
10     }
11 }
```

9. What would be the output of the below code?

```

1  class SampleCode9 {{
2      public static void main(String[] args) {
3          int i = 1, j, sum = 0;
4          while (i <= 5) {
5              if (i % 2 == 0) {
6                  j = i * i;
7                  sum = sum + j;
8              }
9              i++;
10         }
11         System.out.println(sum);
12     }
13 }

```

10. What is the output of the below code?

```

1  for (int j = 0; j < 5; j++) {
2      for (int k = 0; k < 10; k++) {
3          System.out.print('*');
4      }
5      System.out.println();
6  }

```

11. What would be the output of the below code?

```

1  for (int count = 0; count <= 20; count += 2) {
2      System.out.println(count);
3  }

```

12. What should be the output of the below code?

```

1  int x = 0;
2  while (x < 100) {
3      System.out.println(x);
4      x = x + 5;
5  }

```

13. What will be the output of the below program?

```

1  int a = 0;
2  for (int i = 1; i <= 10; i++) {
3      a++;
4      System.out.println(a);
5      if (a == 6)
6          break;
7  }

```

14. What will be the output of the below program?

```

1  int a = 0;
2  for (int i = 1; i <= 10; i++) {
3      a++;
4      if (a % 2 == 0)
5          continue;
6      System.out.println(a);
7  }

```

15. What would be the output of the below code?

```

1  class SampleCode10 {
2      public static void main(String[] args) {
3          int i = 0;
4          while (i <= 20) {
5              i++;

```

```

6             if (i == 10)
7                 break;
8             System.out.println(i);
9         }
10    }
11 }

```

16. What will be the output?

```

1  class SampleCode11 {
2      public static void main(String[] args) {
3          int i = 0;
4          while (i < 10) {
5              i++;
6              if (i == 3 || i == 6 || i == 9)
7                  continue;
8              System.out.println(i);
9          }
10     }
11 }

```

17. What is the output of below code?

```

1  class SampleCode12 {
2      public static void main(String[] args) {
3          int i = 0;
4          do {
5              System.out.println(i);
6              i++;
7          } while (i <= 10);
8      }
9  }

```

18. What is the output of following code?

```

1 class SampleCode13 {
2     public static void main(String[] args) {
3         int i = 50;
4         do {
5             if (i % 5 == 0)
6                 System.out.println(i);
7             i--;
8         } while (i >= 10);
9     }
10 }

```

19. What will be the output of this below code

```

1 class SampleCode14 {
2     public static void main(String[] args) {
3         int i = 40;
4         do {
5             System.out.println(i);
6         } while(i > 0);
7     }
8 }

```

20. What will be the output of the below code?

```

1 class SampleCode15 {
2     public static void main(String[] args) {
3         int x = 15;
4         do {
5             if (x >= 15)
6                 System.out.println(" ONE");
7             else if (x >= 10)
8                 System.out.println(" TWO");
9             else if (x >= 5)
10                System.out.println(" THREE");
11            else
12                System.out.println(" FOUR");
13            x -= 5;
14        } while (x);

```

```
15     }  
16 }
```

21. What will be the output of the below code?

```
1  class SampleCode16 {  
2      public static void main(String[] args) {  
3          int i = 5;  
4          do {  
5              System.out.println(i);  
6              if (i == 5)  
7                  continue;  
8              i++;  
9          } while (i <= 20);  
10     }  
11 }
```