```
Output Related Questions (Looping)
1.
    What will be the output for the following program?
    public class Test
            public static void main(String[] args)
                   int i = 0;
                   for ( String s="a"; s.compareTo("aaa") ! =0; s =
    s + "a")
                         System.out.print(s);
           }
    }
    What will be the output for the following program?
2.
    public class Test
         public static void main(String[] args)
            for (int i = 0; i < 1; System.out.println("HI"))</pre>
              System.out.print("HELLO");
          }
    }
3.
    What will be the output for the following program?
    public class Test
           public static void main(String[] args)
            {
                 int j=0;
                 for (int i = 0; i < 1; j++)
                      System.out.println("HELLO");
            }
    }
4.
    What will be the output for the following program?
    public class Test
    public static void main(String[] args)
             for ( int i = 0; true & ++i<2; i++)
                 System.out.print(i);
         }
    }
5.
    What will be the output for the following program?
    public class Test
    public static void main(String[] args)
```

```
{
                 boolean b=false;
                 for ( int i = 0; b \mid ++i<2; i++)
          {
                        System.out.print(i);
                b=!b;
          }
         }
6.
    public class Test
                   static void main (String [] args)
         public
               for (int i = 0, double x=3.0; i < 2; i++)
                    System.out.println("HELLO ");
          }
             }
7.
      public class demo
         public static void main(String[] args)
               int i=0;
               for(;;)
                    if(i>5)
                          break;
                    else
                           i=i+2;
                    System.out.println(i);
               }
          }
               }
8.
     public class demo
        {
                  public static void main(String[] args)
                  {
               int a,b;
               for (a=6, b=4; a<=24; a=a+6)
                    if (a % b==0)
                          break;
                    System.out.println(a);
               }
           }
```

```
}
9.
             class Demo
               {
                      public static void main(String s[])
                              int a, b;
                              for (a = 1, b = 4; a < b; a++, b--)
                                    System.out.println("a = " + a);
                                    System.out.println("b = " + b);
                      }
               }
10.
           public class Test1
          public static void main(String[] args)
                         int i=0;
               for(i=100; i<=0; i=i-10)
                    System.out.print(i+",");
               }
           }
               }
11.
       public class Test {
          public static void main(String[] args)
                         int i = 0;
                         for (System.out.println("HI") ; i < 1 ; i+</pre>
    + )
                                System.out.println("HELLO GEEKS");
                  }
12
          public class Test
           {
                   public static void main(String[] args)
                                       for(int i = 0; i < 5; i++)
                                        System.out.println("Hello");
                                      break;
                              }
                   }
           }
```

```
13
       public class Test
           public static void main(String[] args)
                     String s = "friends";
                      int x = 0;
                          do
                          {
                                   System.out.print(s.charAt(x));
                                   x++;
                           } while (x < 2);
                 }
14.
          public class Test
           {
                     public static void main(String[] args)
                                while (true)
                                 {
                                       System.out.println("cppbuzz");
                         }
               }
          }
15.
          public class Test
                     public static void main(String[] args)
                                 int i;
                                         for (i = 5; i > 10; i ++)
                                                 System.out.println(i
     );
                                         System.out.println( i * 4 );
                        }
          }
16.
     public class Test
                 public static void main(String[] args)
                  {
                           for(int i = 0; i < 3; i++)
                            {
                                  for (int j = 0; j < i; j++)
                                          System.out.print(i + " " + j
     + ",");
                                  }
                            }
```

```
17.
     public class Test
                 public static void main(String[] args)
                             int i, s = 0;
                             for (int k = 0; k < 5; k++)
                                       i = 0;
                                      do
                                               i++; s++;
                                       \}while (i < k);
                             System.out.println(s);
                   }
18.
     public class Application
                 public static void main(String[] args)
                           String one = "Hello";
                            String two = "Hello";
                             if(one == two)
                                      System.out.println("one ==
    two");
                             }
                            else
                             {
                                    System.out.println("one != two");
                              }
                   }
19.
    public class TestWhile
                    public static void main(String[] args)
                     {
                               int i = 1;
                                int j = 20;
                                int k = 31;
                               while (i < j)
                                        k += (i * j);
                                        i = i * 2;
                                        j--;
                               }
```

```
System.out.println("i = " + i + " j = "
     + \dot{j} + " k = " + k);
20.
     class WhileExample
     {
                   public static void main(String s[])
                               int n = 5;
                               while (n > 0)
                                        n--;
                                       System.out.println("n = " +
    n );
                                }
                     }
     }
21.
       How many times 'ITER' will be printed?
       public class C1
                   public static void main(String[] args)
                              for (int i = 0; i < 5; i++)
                                        System.out.println("ITER");
                                        i++;
                              }
                   }
        }
22.
          public class C2
           {
                     public static void main(String[] args)
                               for (int i = 0; i < 5;)
                                         System.out.println("Hello");
                               }
                       }
          }
23.
       class C3
            public static void main (String args[])
                     for (int i=0; 0; i++)
                                  System.out.println("ICP");
                      }
```

```
public class Test
24.
                        public static void main(String[] args)
                     {
                                             int i;
                                   for (int i = 0; i < 3; i++);
                                             System.out.println(i)
                            }
           }
25.
       public class C5
                   public static void main(String[] args)
                    while(true)
                                            System.out.println("ITER"
     );
                          break;
                             }
                  }
26.
    public class Output1
          public static void main(String[] args)
               for (int i = 0; i < 10; i++)
                                              int x = 10;
               System.out.println("x");
          }
27.
    public class Output2
          public static void main(String[] args)
                      int i = 0;
                                 for (System.out.println("ITER"); i <</pre>
     1; i++)
                                          System.out.println("SOA");
          }
28.
    public class Output3
     {
          public static void main(String[] args)
```

```
for (int \underline{i} = 0; i++)
                                       System.out.println("ICP");
         }
29.
    public class Output4
         public static void main(String[] args)
               for (int i = 0; i < 1;
    System.out.print("ITER ")
                                System.out.println("SOA");
         }
30.
    public class Output5
         public static void main(String[] args)
              int i = 1, j = 1;
                                     for ( ; ;
                                      {
                                        if (i > 5)
                                       break;
                                            else
                                       j += I ;
                                          System.out.println(j);
                                          i += j;
                                        }
         }
31.
    public class Output5
               public static void main(String[] args)
                               int i = 0;
                                while(true)
                                        System.out.println(++i);
                                       break;
                                  }
                 }
32.
    public class Output5
                  public static void main(String[] args)
                           int i = 3, j=5;
```

```
do
                             {
                                    System.out.print(i*j);
                              } while (++i < --j);
                     }
33.
    public class Output5
                      public static void main(String[] args)
                                    char a = 'a';
                                   while (++a \le 100)
                                     {
    System.out.print(a);
                                     }
                        }
34.
    public class Output5
                 public static void main(String[] args)
                              for(int i=0; false; i++)
                                     System.out.println("Hello");
                }
35.
    Find output of the following pseudocode?
    Step 1: Initialize count to 1;
    Step 2: While count is less than 10
    Step 2.1: Print count;
    Step 2.2: count = count + 3;
    Step 3: Stop.
36.
    public class Alpha
          public static void main(String [] args)
          {
                  int cnt=0;
                  while(true)
                               if(cnt > 4)
                                     break;
                                if(cnt==0)
                                           cnt++;
                                           continue;
                                 System.out.print(cnt + ",");
```

```
cnt++;
                         }
                         }
37.
    public class Alpha
          public static void main(String [] args)
                    while(i<3)
                                do
                                {
                                         System.out.print(j + ",");
                                 \}while(j<4);
                                i++;
                      }
                      }
38.
     class Test
     {
           public static void main(String[] args)
                             int i = 0;
                            for (System.out.println("HI"); i < 1; i+</pre>
     +)
                                     System.out.println("HELLO ITER");
                  }
39.
    public class Alpha
          public static void main(String [] args)
          {
                            int i , j;
                   for(i=0;i<3;i++)
                  {
                     for(j=1;j<4;j++)
                          i%=j;
                          System.out.println(j);
                     }
                }
                    }
40.
    public class Test
              public static void main(String agrs[])
              {
```

```
int i;
                         for(i=1; i<=10; i++);
                                  System.out.print(i);
               }
41.
    What will be the output for the following program?
          class Test
           {
                         public static void main(String[] args)
                                     do
                                     {
                                              while (true)
                                                     System.out.printl
          n ("HELLO");
                                      }while (false);
                             }
42.
    What will be the output for the following program?
    class Test
     {
               public static void main(String[] args)
                         do
                               System.out.println("FRIENDS");
                         while (true);
                          System.out.println("ENEMY");
                 }
43.
    What will be the output for the following program?
          class Test
                   public static void main(String[] args)
                                int x = 1, y = 2;
                                do
                                       System.out.println("FRIENDS");
                                 } while (x < y);
                                System.out.println("ENEMY");
                    }
          }
    public class Test
44.
             public static void main(String agrs[])
              {
```

```
for(int i=1; i<=10; i++);
                                 System.out.print(i);
               }
45.
    class Test
     {
               public static void main(String[] args)
                         for(int i = 0; 1; i++)
                               System.out.println("Hello");
                               break;
                         }
                 }
    class Test
46.
                public static void main(String[] args)
                           do
                           {
                                     System.out.print(1);
                                       do
                                       {
                                                 System.out.print(2);
                                       } while (false);
                               } while (false);
                    }
     }
47.
    public class Testing
                   public static void main(String[] args)
                    {
                               loop1:
                               for (int i = 0; i < 5; i++)
                                         for (int j = 0; j < 5; j++)
                                                  if (i == 3)
                                                         break loop1;
    System.out.println("i = " + i + " j = " + j);
                                }
                       }
48.
    public class Testing
```

```
public static void main(String[] args)
                                    int x = 3, k;
                                    while (x-- \ge 0)
                                      {
                                                  System.out.println
     (x);
                                     }
                    }
49.
    public class Testing
                 public static void main(String[] args)
                            int x = -10;
                            while (x++ != 0)
                            System.out.println(x);
                 }
50.
          Find the output of the code:
               public class Demo
                       public static void main (String []args)
                                  int n = 6, i=0;
                                   for (i=0; Math.pow(2,i) \le n; i++);
                                              System.out.println(i);
                       }
51.
          Find the output of the code:
               public class Demo
                         public static void main (String []args)
                                       int n = 6, i=0;
                                        while (Math.pow(2,i) \le n);
               System.out.println(i);
               }
52.
          Find the output of the code:
               public class Demo
               {
```

```
public static void main (String
               []args)
                               {
                                         int n = 6, i, j;
                                           for (i=0, j=0; i< n; i++, j++)
               System.out.println(i+" "+j);
                }
53.
          Find the output of the code:
               public class Demo
                        public static void main (String []args)
                                  do
                                 {
                                        System.out.println(i);
                                  } while (i < = 5);
                         }
54.
    class Test
               public static void main(String[] args)
          {
               do
                   while (true)
                    System.out.println("HELLO");
                }while (false);
          }
55.
     class Test
       {
                   public static void main(String[] args)
           {
                do
                          System.out.print(1);
                          do
                              System.out.print(2);
                           } while (false);
                 } while (false);
           }
```

```
}
56.
    Public class Test
     {
                    public static void main(String[] args)
                                int x = 30, y = 50;
                               if (x < y)
                                     int a = 40;
                              else
                          {
                                       System.out.println("BYE");
                                }
                     }
57.
    Public class Test
     {
                    public static void main(String[] args)
                          for(i=0;i<10;i++)
                           for (j=-5; j<10; j++)
                                   if(i==j)
                         break;
                                   System.out.println("Hello");
                             }
                           }
                   }
58.
    Public class Test
     {
                    public static void main(String[] args)
                    {
                          int i=2;
                          for( ; ; )
                            System.out.println("Hi");
                          }
                  }
59.
    Public class Test
     {
                    public static void main(String[] args)
```

```
for(int i = 0; i < 5; i++)
                             System.out.println("Hello");
                             i++;
                             i--;
                             }
                  }
    Public class Test
60.
     {
                    public static void main(String[] args)
                     {
                               for(int i = 0; i < 5; i = 5)
                                         System.out.println("Hello");
                                 }
                    }
61.
    Public class Test
     {
                    public static void main(String[] args)
                     {
                             String s = "School";
                             int x = 0;
                             do
                                       System.out.print(s.charAt(x));
                                       x++ ;
                            \} while (x < 2)
                     }
62.
    public class Alpha
          public static void main(String [] args)
                          int i=0;
                          for(i=1; i<=6;i++)
                     {
                                      if(i%3==0)
                                                       continue;
          System.out.print(i+",");
                  }
63.
          Find the output of the code:
               public class Demo
```

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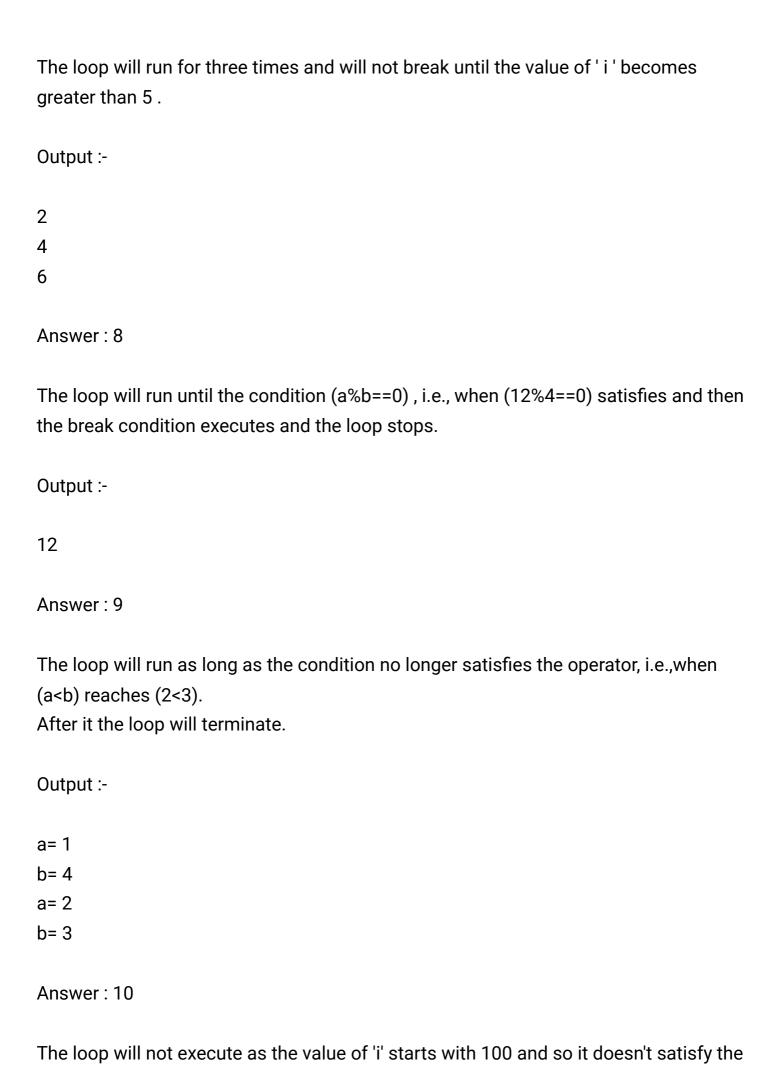
HELLO

HELLO

The for loop is initialized with a variable s with "a" as the value. The loop continues until s.compareTo returns 0. As increment condition, it concats the variable s with a.
Output :-
aaa
Answer:2
The loop will run for infinite no. of times . As value of i is never incremented and i<1,will never be true thus loop never breaks when and keeps printing.
Output :-
HI HELLOHI
HELLOHI
Answer:3
The loop will execute the program infinity times because thereis no increment operator for i (i.e., i< 1), is never executed.
Output :-

····

Answer 4:
++i updates value of i in very first iteration to 1. In next iteration i++ updates value to 2 and ++i makes it 3. (3<2) is false, true and false returns false and loop breaks.
Output :-
1
Answer 5:
++i updates the value of i in very first iteration to 1 and so when (++i <2)=(1<2) condition satisfies and it prints the value but after second iteration i's value updates to 2 and so then the loop terminates.
Output :-
1
Answer 6:
The loop will not execute because it shows syntax error as well as type mismatch error.
Output :-
Syntax error Type mismatch
Answer: 7



condition i.e., (100<=0) so the loop will terminate and the output remains empty.
Output :-
Blank (No output)
Answer: 11
The loop will run for once when (i<1) i.e., $(0<1)$, then the loop will not run for second time because when the value of 'i' reaches " 1 " due to increment operator, it no longer satisfies the condition i.e., $(1<1)$ which is not true so the loop will terminate.
Output :-
HI HELLO GEEKS
Answer: 12
The loop will run for once because it is satisfying the condition, so after once executing the program the loop will break and terminate.
Output :-
Hello
Answer: 13
The loop will run for two times because the value of ' x ' satisfies the while condition only two times i.e., when ' x ' is equal to (0 and 1) and after that the loop terminates and it prints the alphabet on the string ' x ' which is present on the (0 & 1) position.
Output :-

r

Answer: 14

The while loop holds the value (true) for the program and doesn't give a condition as to when to terminate it, so the loop executes to infinity.

Output:-

cppbuzz

Answer: 15

The loop will run for once as after printing the new value of 'i' it gets updated in the for loop which is greater than the condition asking for, so the program will terminate.

Output:-

20

Answer: 16

The loop will terminate after 3 times as it will no longer satisfy the condition of 'i' and 'j' when the increment operator reaches to "3" i.e., when (3<3) the loop will terminate.

Output:-

- 0 0.
- 1 0,
- 2 0,

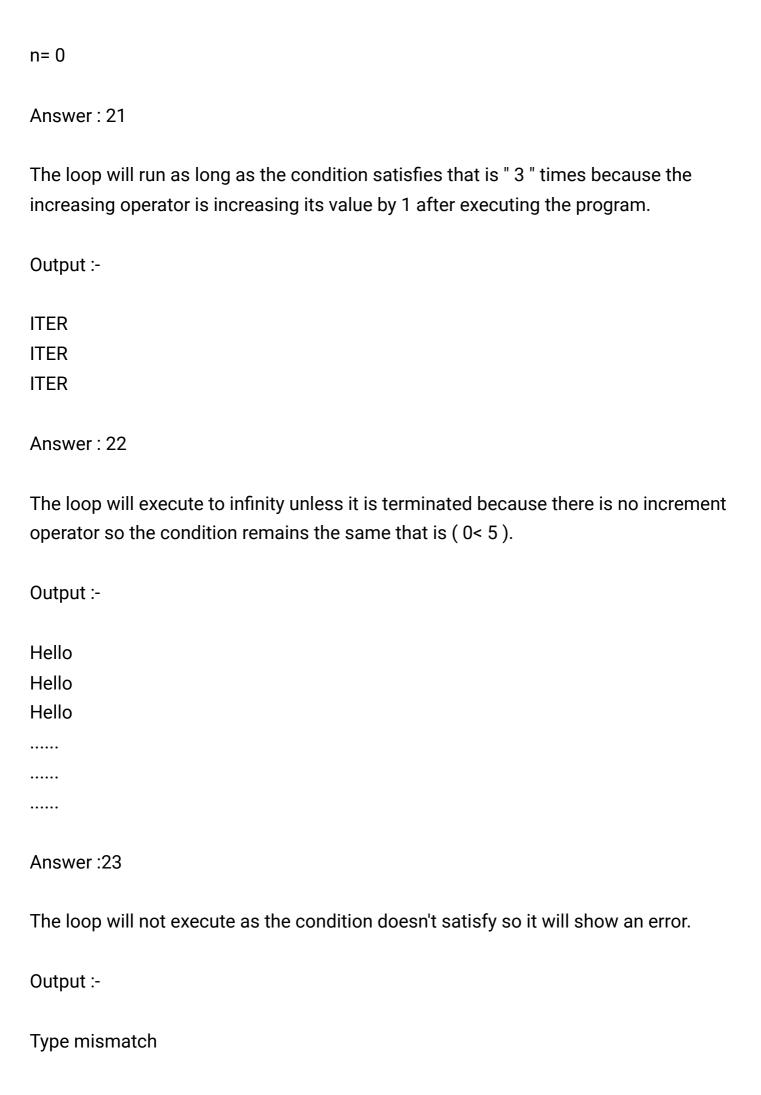
Answer: 17

There is a nested loop in this program, so it will going to repeat the inner loop and so the loop executes till the program will be no longer able to satisfy the condition in the

program and after that it terminates. Output:-11 Answer: 18 The logical operation in the program satisfies with the first statement so it will be going to execute the first sentence otherwise if it would have not satisfied the first condition then it would have checked the second sentence and would have executed the program. Output:one == two Answer: 19 The loop will run run for 4 times First when (1<20) where k= 51, i= 2 and j= 19 Second when (2<19) where k= 89, i= 4 and j= 18 Third when (4<18) where k= 161, i = 8 and j = 17 Fourth when (8<17) where k= 297, i=16 and j= 16 And at fifth step the loop terminates that is when (16<16) Output:-Answer: 20

The loop will run until the decrement operator meet its satisfying condition.

Output:-



Answer: 24
The loop will not execute and will show an error .
Output :-
Duplicate local variable I
Answer: 25
The loop will execute once because after executing it once, break statement is there, so the program will terminate.
Output :-
ITER
Answer: 26
The program will not execute due to error.
Output :-
Syntax error
Answer: 27
The program will execute for one time because the condition satisfies when $(i<1)$ that is $(0<1)$ but after increment operator that is $(1<1)$ the loop will terminate.
Output :-
ITER SOA

The program will run to infinity because there is no break statement or unless the program is terminated by the user.
Output :-
ICP
ICP
ICP

···
···

Answer: 29
The program will run to infinity because there is no increment operator
so the condition remains the same that is (0<1)
Output :-
ITER
SOA
ITER
SOA
•••••

Answer: 30

Answer: 28

The loop will run run for 2 times First when (i>5) that is (1>5) which is false then (j+=i) that is (j=2) and (i+= j) that is (i = 3)Second when (i>5) that is (3>5) which is false then (j+=i) that is (j=5) and (i+=j) that is (i=7)Third time the loop will break Output:-2 5 Answer: 31 The program will execute only once because after increment of 'i' operator, the loop runs and then break statement is used. Output:-1 Answer: 32 The program will execute for once because it satisfies the condition (++i < -j) which is (3 < 5) and in the second step it becomes (4 < 3) which is false. Output:-15 Answer: 33 The program will run for three times because after that, the condition (++a<=100) will

not satisfy, as the increment oprator will increase the value of 'a' which will be out of

the range of the condition.

Output :-
b c d
Answer: 34
The program will not run as there is an error
Output :-
Syntax error
Answer: 35
The program will run for three times as the condition (count = count + 3) holds the value of (count <10).
Output :-
1 4 7
Answer: 36
The program will run upto 4 times because of the continue statement when the increment 'cnt' value reaches 4 the loop will break due to the break statement.
Output :-
1,2,3,4,

Answer: 37
The program won't run run because there is a variable declaration syntax error.
Output :-
i cannnot be resolved to a variable
Answer: 38
The program won't run because there is a syntax error.
Output :-
Syntax error on token
Answer: 39
The loop will run to infinity after executing three - three numbers trio formation
Output :-
1
2
3
1
2
3
•
•
•

Answer: 40 The loop will run until the condition satisfies that is (i<=10) and so when the loop reaches 10 the increment operator increments the value by 1 and it executes the next value. Output:-11 Answer: 41 The program won't execute because there is an error in the program. Output:-Logical error Answer: 42 The program won't execute because there is an error in the program. Output:-Unresolved compilation error Answer: 43 The condition (x<y) doesn't have an break statement so the loop will run to infinity unless terminated by the user. Output:-**FRIENDS**

FRIENDS

FRIENDS
•••••
Answer: 44
The program won't run because there is a error in the program.
Output :-
' i ' cannot be resolved to a variable.
Answer: 45
The program won't execute because there is a error in the program.
Output :-
Type mismatch cannot convert from int to Boolean.
Answer: 46
The loop will run and will print the value alongside each other.
Output :-
12
Answer: 47
The loop will run until the condition (i== 3) satisfies and when it satisfies the loop will break and program will stop.

Output :-
i = 2 $j = 1i = 2$ $j = 2i = 2$ $j = 3i = 2$ $j = 4$
Answer: 48
The program will run as long as the condition satisfies (x>= 0) that is $(-1 >= 0)$
Output :-
2 1 0 -1
Answer: 49
The loop will run until the condition while $(x-!=0)$ and as soon as the condition satisfies it gives a single output.
Output :-
1
Answer: 50
The loop will run until the condition (Math.pow (2 ,i) <= n) exceeds the value of 'n' and then we execute the statement.

Output :-

Answer: 51

The program won't execute because there is no increment operator and because of that the while condition will not satisfy and will not print any value.

Output:-

Blank (No output)

Answer: 52

The program will run until the condition (i<n) satisfies and will go on incrementing both the operators simultaneously.

Output:-

- 2 2
- 3 3
- 4 4
- 5 5

Answer: 53

The program won't execute because there is a error in the program.

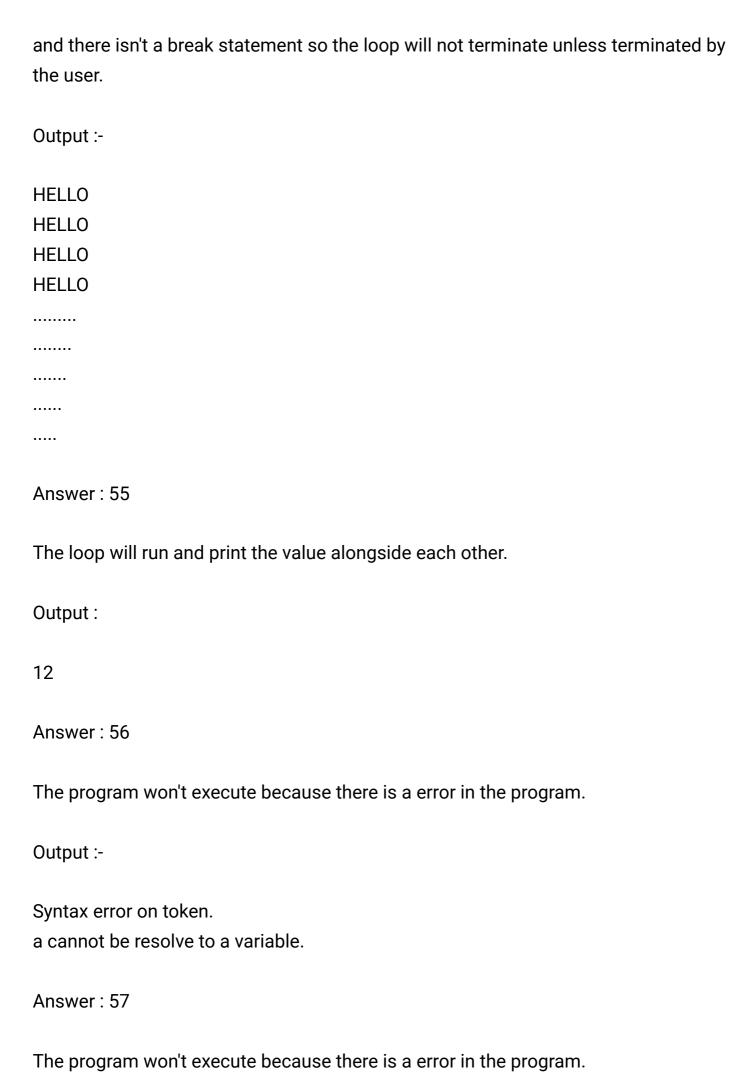
Output :-

'i' cannnot be resolved to a variable.

Syntax error on token.

Answer: 54

The program will run to infinity because the while loop holds true value for the program



Output :-
Syntax error on token. a cannot be resolve to a variable.
Answer: 58
The program will run to infinity because there is no break operator to break the loop so the program will not be terminated unless the user terminates it.
Output :-
Hi Li:
Hi
Hi
Hi
Hi
•••
••

··
Answer: 59
The loop will run until the condition (i<5) satisfies while incrementing and
decrementing the operators.
Output :-
Hello
Hello
Hello

Hello
Answer: 60
The loop will run until the condition satisfies and then it will print the statement.
Output :-
Hello
Answer: 61
The program won't execute because there is a error in the program.
Output :-
Syntax error on token
Answer: 62
The loop will execute the program till the last number of iterations and it will not print the value of the iteration which satisfies the condition ($i\%3==0$)
Output :-
1,2,4,5,
Answer: 63
The loop will run to infinity because there is no increment or decreament operator , though it has a condition $(n!=0)$ but it isn't have enough to stop the loop and it isn't have a break statement so the loop will continue unless it is terminated by the user
Output :- 6

6

6

6

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