Trace the output of the following programs

In the following tasks,

First, save->compile->run it in Dr. Java / Jeilot and

Then, trace the output of the code by hand

Try to matching each of your manual output with output shown in DrJava / Jeliot

|  |  |
| --- | --- |
| 1 | public class Q1 |
| 2 | { |
| 3 | public static void main(String[] args) |
| 4 | { |
| 5 | int x = 0, y =0; |
| 6 | int sum = 0; |
| 7 | while (x < 10){ |
| 8 | y = x - 3; |
| 9 | y = 40; |
| 10 | while (y > 22){ |
| 11 | if ((sum > 30) && (sum < 40)) |
| 12 | sum = sum + x \* 2 ; |
| 13 | else if ((sum > 40) && (sum < 50)) |
| 14 | sum = sum + x \* 3; |
| 15 | else |
| 16 | sum = sum + 23; |
| 17 | System.out.println(sum); |
| 18 | y = y - 10; |
| 19 | } |
| 20 | x += 2; |
| 21 | } |
| 22 | } |
| 23 | } |

|  |  |
| --- | --- |
| 1 | public class Q2 |
| 2 | { |
| 3 | public static void main(String[] args) |
| 4 | { |
| 5 | String test = ""; |
| 6 | int i = 0, j = 0, k = 15; |
| 7 | while (i< 5){ |
| 8 | test = "-->"; |
| 9 | j = --k; |
| 10 | while (j > 10 ){ |
| 11 | test = i + j + test + i + j; |
| 12 | System.out.println(test); |
| 13 | j--; |
| 14 | } |
| 15 | i++; |
| 16 | } |
| 17 | } |
| 18 | } |

|  |  |
| --- | --- |
| 1 | public class Q3{ |
| 2 | public static void main(String[] args){ |
| 3 | int x = 0, y =0; |
| 4 | int sum = 0; |
| 5 | while (x < 10){ |
| 6 | y = x - 3; |
| 7 | while (y < 3){ |
| 8 | sum = (sum % 2) + x - y \* 2 ; |
| 9 | System.out.println(sum); |
| 10 | y = y + 1; |
| 11 | } |
| 12 | if (x > 5){ |
| 13 | x++; |
| 14 | }else{ |
| 15 | x += 2; |
| 16 | } |
| 17 | } |
| 18 | } |
| 19 | } |

|  |  |
| --- | --- |
| 1 | public class Q4{ |
| 2 | public static void main(String[] args){ |
| 3 | int x = 0, i =0, sum = 0; |
| 4 | i = 1; |
| 5 | x = 2; |
| 6 | sum = 0; |
| 7 | while (i< 20){ |
| 8 | x = x + i; |
| 9 | sum = sum + x + 1; |
| 10 | System.out.println(sum); |
| 11 | if (x > 5) |
| 12 | i += 2; |
| 13 | else |
| 14 | i += 3; |
| 15 | } |
| 16 | sum = sum + i; |
| 17 | System.out.println(sum); |
| 18 | } |
| 19 | } |

|  |  |
| --- | --- |
| 1 | public class Q5{ |
| 2 | public static void main(String[] args){ |
| 3 | String test = ""; |
| 4 | int i = 0, j = 0, k = 15; |
| 5 | test = "-->"; |
| 6 | while (i< 5){ |
| 7 | j = --k; |
| 8 | while (j > 10 ){ |
| 9 | test = i + j + "-->" + test; |
| 10 | System.out.println(test); |
| 11 | j--; |
| 12 | } |
| 13 | i++; |
| 14 | } |
| 15 | } |
| 16 | } |

|  |  |
| --- | --- |
| 1 | public class Q6{ |
| 2 | public static void main(String[] args){ |
| 3 | int x = 0, p =0, sum = 0; |
| 4 | p = 1; |
| 5 | x = 2; |
| 6 | double q; |
| 7 | sum = 0; |
| 8 | while (p < 10){ |
| 9 | q = x + p-(sum+5/3)/3.0%2 ; |
| 10 | sum = sum + (x++) + (int)q; |
| 11 | System.out.println(sum); |
| 12 | if (x > 5) |
| 13 | p += 4/2; |
| 14 | else |
| 15 | p += 3%1; |
| 16 | } |
| 17 | sum = sum + p; |
| 18 | System.out.println(sum); |
| 19 | } |
| 20 | } |

|  |  |
| --- | --- |
| 1 | public class Q7{ |
| 2 | public static void main(String[] args){ |
| 3 | int test = 1; |
| 4 | int j = 0, k = 100; |
| 5 | while (k > 0){ |
| 6 | while (j < k ){ |
| 7 | test = k - j + 21; |
| 8 | System.out.println(1 + test); |
| 9 | j += 10; |
| 10 | } |
| 11 | k -= 10; |
| 12 | } |
| 13 | } |
| 14 | } |

|  |  |
| --- | --- |
| 1 | public class Q8{ |
| 2 | public static void main(String[] args){ |
| 3 | int test = 1; |
| 4 | int j = 0, k = 100; |
| 5 | while (k > 0){ |
| 6 | while (j < k ){ |
| 7 | test = k - j + 11; |
| 8 | System.out.println(1 + test / 3 +"12"); |
| 9 | j+=10; |
| 10 | } |
| 11 | k-=10; |
| 12 | } |
| 13 | } |
| 14 | } |

|  |  |
| --- | --- |
| 1 | public class Q9{ |
| 2 | public static void main(String[] args){ |
| 3 | int x = 0; |
| 4 | int y = 0; |
| 5 | int sum = 0; |
| 6 | double p; |
| 7 | while(x <18){ |
| 8 | y = x / 2; |
| 9 | while(y < x){ |
| 10 | p = (x + 15.0) /2; |
| 11 | sum = (sum + 3) + x + y \* 3 + (int)p; |
| 12 | System.out.println(sum); |
| 13 | y = y + 3; |
| 14 | } |
| 15 | x = x + 3; |
| 16 | } |
| 17 | } |
| 18 | } |

|  |  |
| --- | --- |
| 1 | public class Q10 { |
| 2 | public static void main(String[] args) { |
| 3 | int x = 0, y = 0; |
| 4 | String sum = "0"; |
| 5 | double p; |
| 6 | while (x < 9) { |
| 7 | y = x / 2; |
| 8 | while (y < x) { |
| 9 | p = (x + 5.0) / 2; |
| 10 | sum = (sum + 2) + x + "y \* 2" + (int) p ; |
| 11 | System.out.println(sum); |
| 12 | y = y + 1; |
| 13 | } |
| 14 | x = x + 2; |
| 15 | if (x > 5) { |
| 16 | sum = "2"; |
| 17 | } else { |
| 18 | sum += "3"; |
| 19 | } |
| 20 | } |
| 21 | } |
| 22 | } |

|  |  |
| --- | --- |
| 1 | public class Q11 { |
| 2 | public static void main(String[] args) { |
| 3 | String test = ""; |
| 4 | int i = 1, j = 1, k = 14; |
| 5 | test = "-->"; |
| 6 | while (i< 5) { |
| 7 | j = --k; |
| 8 | while (j > 9 ) { |
| 9 | test = i + (j-2) + "-->" + test; |
| 10 | System.out.println(test); |
| 11 | j--; |
| 12 | } |
| 13 | i++; |
| 14 | } |
| 15 | } |
| 16 | } |

|  |  |
| --- | --- |
| 1 | public class Q12 { |
| 2 | public static void main(String[] args) { |
| 3 | int p = 5; |
| 4 | int q = 6; |
| 5 | int r = 9; |
| 6 | int sum = 0; |
| 7 | if (p < 12) { |
| 8 | System.out.println(r + 2); |
| 9 | } else { |
| 10 | System.out.println(r + p); |
| 11 | } |
| 12 |  |
| 13 | if (q > 20){ |
| 14 | System.out.println(r + 19); |
| 15 | } else if (q <= 6) { |
| 16 | System.out.println(q + 3); |
| 17 | } else{ |
| 18 | System.out.println(p + q + r); |
| 19 | } |
| 20 |  |
| 21 | if (r > 15) { |
| 22 | System.out.println(r); |
| 23 | } else if (r == 0) { |
| 24 | System.out.println(p + q); |
| 25 | } else { |
| 26 | System.out.println(p); |
| 27 | } |
| 28 |  |
| 29 | if (sum != 0) { |
| 30 | System.out.println(3); |
| 31 | } else { |
| 32 | System.out.println(sum + 32); |
| 33 | } |
| 34 |  |
| 35 | if(p > 0 && r < 10){ |
| 36 | System.out.println(p + r); |
| 37 | } else { |
| 38 | System.out.println(p - r); |
| 39 | } |
| 40 | } |
| 41 | } |

|  |  |
| --- | --- |
| 1 | public class Quiz13 { |
| 2 | public static void main(String[] args){ |
| 3 | int x = 0, p = 0, sum = 0; |
| 4 | p = 1; |
| 5 | x = 2; |
| 6 | double q; |
| 7 | sum = 0; |
| 8 | while (p < 10) { |
| 9 | q = x + p-(sum+5/3)/3.0%2 ; |
| 10 | sum = sum + (x++) + (int)q; |
| 11 | System.out.println(sum); |
| 12 | if (x > 5) |
| 13 | p += 4/2; |
| 14 | else |
| 15 | p += 3%1; |
| 16 | } |
| 17 | sum = sum + p; |
| 18 | System.out.println(sum); |
| 19 | } |
| 20 | } |

|  |  |
| --- | --- |
| 1 | public class Q14 { |
| 2 | public static void main(String[] args) { |
| 3 | int x = 0, i =0, sum = 0; |
| 4 | i = 1; |
| 5 | x = 2; |
| 6 | sum = 0; |
| 7 | while (i< 20){ |
| 8 | x = x + i; |
| 9 | sum = sum + x + 1; |
| 10 | System.out.println(sum); |
| 11 | if (x > 5) |
| 12 | i += 2; |
| 13 | else |
| 14 | i += 3; |
| 15 | } |
| 16 | sum = sum + i; |
| 17 | System.out.println(sum); |
| 18 | } |
| 19 | } |

|  |  |
| --- | --- |
| 1 | public class Q15 { |
| 2 | public static void main(String[] args) { |
| 3 | int x = 0, y =0; |
| 4 | int sum = 0; |
| 5 | while (x < 10){ |
| 6 | y = x - 3; |
| 7 | y = 40; |
| 8 | while (y > 22){ |
| 9 | if ((sum > 30) && (sum < 40)) |
| 10 | sum = sum + x \* 2 ; |
| 11 | else if ((sum > 40) && (sum < 50)) |
| 12 | sum = sum + x \* 3; |
| 13 | else |
| 14 | sum = sum + 23; |
| 15 | System.out.println(sum); |
| 16 | y = y - 10; |
| 17 | } |
| 18 | x += 2; |
| 19 | } |
| 20 | } |
| 21 | } |

|  |  |
| --- | --- |
| 1 | public class Q16 { |
| 2 | public static void main(String[] args) { |
| 3 | boolean var1=false, var2=false, var3=false, var4=false,var5=false; |
| 4 | boolean var6=false, result1=false, result2=false, result3=false, result4=false; |
| 5 | boolean result5=false, result6=false, result7=false, result8=false; |
| 6 | boolean result9=false, result10=false; |
| 7 | var1=4 > 3 - 1; |
| 8 | var2=var1 && false; |
| 9 | var3=true; |
| 10 | var4=false; |
| 11 | var5=true; |
| 12 | var6=var3 && false; |
| 13 | result1=(var1 || var2) && (8 \* 10 > 45); |
| 14 | result2=(var1 || var2) && (result1 && false); |
| 15 | result3=(var1 && result1) || result2; |
| 16 | result4=(var1 || var2) || ((var3 && var1) && false); |
| 17 | result5=(var1 && var2) && (result3 || var1); |
| 18 | result6=((var3 || var2) && !(result5)) || true; |
| 19 | result7=(var4 && result1) && ((result1 && false) || true); |
| 20 | result8=((var1 && result3) && (var5 || var6)) && true; |
| 21 | result9=((result2 && var2) || (result7 && var1)) && false; |
| 22 | result10=!(var1 && true); |
| 23 | } |
| 24 | } |

Show the values of the result variables in the above program:

|  |  |
| --- | --- |
| result1 |  |
| result2 |  |
| result3 |  |
| result4 |  |
| result5 |  |
| result6 |  |
| result7 |  |
| result8 |  |
| result9 |  |
| result10 |  |

|  |  |
| --- | --- |
| 1 | public class Q17 { |
| 2 | public static void main(String[] args) { |
| 3 | int x = 0, i = 0, sum = 0; |
| 4 | i = 1; |
| 5 | x = 2; |
| 6 | sum = 0; |
| 7 | while (i< 20) { |
| 8 | x = x + i; |
| 9 | sum = sum + x + 3; |
| 10 | System.out.println(sum); |
| 11 | if (x > 5) |
| 12 | i += 2; |
| 13 | else |
| 14 | i += 3; |
| 15 | } |
| 16 | sum = sum + i; |
| 17 | System.out.println(sum); |
| 18 | } |
| 19 | } |
| 1 | public class Q18 { | |
| 2 | public static void main(String[] args) { | |
| 3 | int x = 0, y =0; | |
| 4 | int sum = 0; | |
| 5 | while (x < 10){ | |
| 6 | y = x - 3; | |
| 7 | y = 40; | |
| 8 | while (y > 22){ | |
| 9 | if ((sum > 30) && (sum < 40)) | |
| 10 | sum = sum + x \* 3 ; | |
| 11 | else if ((sum > 40) && (sum < 50)) | |
| 12 | sum = sum + x \* 4; | |
| 13 | else | |
| 14 | sum = sum + 24; | |
| 15 | System.out.println(sum); | |
| 16 | y = y - 10; | |
| 17 | } | |
| 18 | x += 2; | |
| 19 | } | |
| 20 | } | |
| 21 | } | |

|  |  |
| --- | --- |
| 1 | public class Q19 { |
| 2 | public static void main(String[] args) { |
| 3 | boolean var1=false, var2=false, var3=false, var4=false,var5=false; |
| 4 | boolean var6=false, result1=false, result2=false, result3=false, result4=false; |
| 5 | boolean result5=false, result6=false, result7=false, result8=false; |
| 6 | boolean result9=false, result10=false; |
| 7 | var1=4 < 3 - 1; |
| 8 | var2=var1 && false; |
| 9 | var3=false; |
| 10 | var4=true; |
| 11 | var5=false; |
| 12 | var6=var3 && true; |
| 13 | result1=(var1 || var2) && (8 \* 10 > 45); |
| 14 | result2=(var1 || var2) && (result1 && false); |
| 15 | result3=(var1 && result1) || result2; |
| 16 | result4=(var1 || var2) || ((var3 && var1) && false); |
| 17 | result5=(var1 && var2) && (result3 || var1); |
| 18 | result6=((var3 || var2) && !(result5)) || true; |
| 19 | result7=(var4 && result1) && ((result1 && false) || true); |
| 20 | result8=((var1 && result3) && (var5 || var6)) && true; |
| 21 | result9=((result2 && var2) || (result7 && var1)) && false; |
| 22 | result10=!(var1 && true); |
| 23 | } |
| 24 | } |

Show the values of the result variables in the above program:

|  |  |
| --- | --- |
| result1 |  |
| result2 |  |
| result3 |  |
| result4 |  |
| result5 |  |
| result6 |  |
| result7 |  |
| result8 |  |
| result9 |  |
| result10 |  |

|  |  |
| --- | --- |
| 1 | public class Q20 { |
| 2 | public static void main(String[] args) { |
| 3 | int x = 0, y =0; |
| 4 | int sum = 0; |
| 5 | while (x < 10) { |
| 6 | y = x - 3; |
| 7 | while (y < 3) { |
| 8 | sum = x - y \* 2 ; |
| 9 | System.out.println(sum); |
| 10 | y = y + 1; |
| 11 | } |
| 12 | if (x > 7) { |
| 13 | x++; |
| 14 | } else { |
| 15 | x += 3; |
| 16 | } |
| 17 | } |
| 18 | sum = x - y \* 2 ; |
| 19 | System.out.println(sum); |
| 20 | } |
| 21 | } |

|  |  |
| --- | --- |
| 1 | public class Q21 { |
| 2 | public static void main(String[] args) { |
| 3 | int x = 0, y =0; |
| 4 | int sum = 0; |
| 5 | while (x < 10) { |
| 6 | y = x - 3; |
| 7 | while (y < 3) { |
| 8 | sum = x - y \* 3 ; |
| 9 | System.out.println(sum); |
| 10 | y = y + 1; |
| 11 | } |
| 12 | if (x > 7) { |
| 13 | x++; |
| 14 | } else { |
| 15 | x += 3; |
| 16 | } |
| 17 | } |
| 18 | sum = x - y \* 3 ; |
| 19 | System.out.println(sum); |
| 20 | } |
| 21 | } |

|  |  |
| --- | --- |
| 1 | public class Q22 { |
| 2 | public static void main(String[] args) { |
| 3 | int x = 0, y =0; |
| 4 | int sum = 0; |
| 5 | while (x < 10) { |
| 6 | y = x - 3; |
| 7 | y = 40; |
| 8 | while (y > 22) { |
| 9 | if ((sum > 30) && (sum < 40)) |
| 10 | sum = sum + x \* 2 ; |
| 11 | else if ((sum > 40) && (sum < 50)) |
| 12 | sum = sum + x \* 3; |
| 13 | else |
| 14 | sum = sum + 23; |
| 15 | System.out.println(sum); |
| 16 | y = y - 10; |
| 17 | } |
| 18 | x += 2; |
| 19 | } |
| 20 | } |
| 21 | } |

|  |  |
| --- | --- |
| 1 | public class Q23 { |
| 2 | public static void main(String[] args) { |
| 3 | int x = 0, y = 0; |
| 4 | int sum = 0; |
| 5 | while (x < 10) { |
| 6 | y = x - 3; |
| 7 | y = 40; |
| 8 | while (y > 22) { |
| 9 | if ((sum > 30) && (sum < 40)) |
| 10 | sum = sum + x \* 3 ; |
| 11 | else if ((sum > 40) && (sum < 50)) |
| 12 | sum = sum + x \* 4; |
| 13 | else |
| 14 | sum = sum + 24; |
| 15 | System.out.println(sum); |
| 16 | y = y - 10; |
| 17 | } |
| 18 | x += 2; |
| 19 | } |
| 20 | } |
| 21 | } |

|  |  |
| --- | --- |
| 1 | public class Q24 { |
| 2 | public static void main(String[] args) { |
| 3 | int x = 0, p = 0, sum = 0; |
| 4 | p = 1; |
| 5 | x = 2; |
| 6 | double q; |
| 7 | sum = 0; |
| 8 | while (p < 12){ |
| 9 | q = x + p-(sum+5/3)/3.0%2 ; |
| 10 | sum = sum + (x++) + (int)q; |
| 11 | System.out.println(sum); |
| 12 | if (x > 5) |
| 13 | p += 4/2; |
| 14 | else |
| 15 | p += 3%1; |
| 16 | } |
| 17 | sum = sum + p; |
| 18 | System.out.println(sum); |
| 19 | } |
| 20 | } |

|  |  |
| --- | --- |
| 1 | public class Q25 { |
| 2 | public static void main(String[] args) { |
| 3 | int test = 1; |
| 4 | int j = 0, k = 100; |
| 5 | while (k > 0) { |
| 6 | while (j < k ) { |
| 7 | test = k + j - 21; |
| 8 | System.out.println(1 + test / 2 +"32"); |
| 9 | j+=10; |
| 10 | } |
| 11 | k-=10; |
| 12 | } |
| 13 | } |
| 14 | } |

|  |  |
| --- | --- |
| 1 | public class Q26 { |
| 2 | public static void main(String[] args) { |
| 3 | String test = ""; |
| 4 | int i = 5, j = 0, k = 15; |
| 5 | while (i< 10){ |
| 6 | k -= 1; |
| 7 | j = k; |
| 8 | while (j > 10 ) { |
| 9 | if (j % 2 == 0) { |
| 10 | test = "<--"; |
| 11 | test = test + i + 2 + "-->" + (j / 2); |
| 12 | } else { |
| 13 | test = "-->"; |
| 14 | test = "-->" + (i / 2) + test + j; |
| 15 | } |
| 16 | System.out.println(test); |
| 17 | --j; |
| 18 | } |
| 19 | i++; |
| 20 | } |
| 21 | } |
| 22 | } |

|  |  |
| --- | --- |
| 1 | public class Q27 { |
| 2 | public static void main(String[] args) { |
| 3 | int x = 0, p = 0, sum = 0; |
| 4 | p = 1; |
| 5 | x = 2; |
| 6 | double q; |
| 7 | sum = 0; |
| 8 | while (p < 12) { |
| 9 | q = x + p-(sum+7/3)/3.0%2 ; |
| 10 | sum = sum + (x++) + (int)q; |
| 11 | System.out.println(sum); |
| 12 | if (x > 5) |
| 13 | p += 4/2; |
| 14 | else |
| 15 | p += 3%1; |
| 16 | } |
| 17 | sum = sum + p; |
| 18 | System.out.println(sum); |
| 19 | } |
| 20 | } |

|  |
| --- |
| public class Q28 { |
| public static void main(String[] args) { |
| int test = 1; |
| int j = 0, k = 100; |
| while (k > 0){ |
| while (j < k ){ |
| test = k - j + 21; |
| System.out.println(1 + test / 2 +"11"); |
| j+=10; |
| } |
| k-=10; |
| } |
| } |
| } |

|  |
| --- |
| public class Q29 { |
| public static void main(String[] args) { |
| String test = ""; |
| int i = 5, j = 0, k = 15; |
| while (i< 10){ |
| k -= 1; |
| j = k; |
| while (j > 10 ){ |
| if (j % 2 == 0){ |
| test = "<--"; |
| test = test + i + 3 + "-->" + (j / 3); |
| }else{ |
| test = "-->"; |
| test = "-->" + (i / 3) + test + j ; |
| } |
| System.out.println(test); |
| --j; |
| } |
| i++; |
| } |
| } |
| } |

|  |
| --- |
| public class Q30 { |
| public static void main(String[] args) { |
| String test = ""; |
| int i = 0, j = 0, k = 15; |
| test = "<--cat"; |
| while (i< 5){ |
| k-=1; |
| j = k; |
| while (j > 10 ){ |
| if (j % 2 == 0){ |
| test += "-->"; |
| test = test + i + (j / 2); |
| }else{ |
| test += "<--"; |
| test = test + (i / 2) + j; |
| } |
| System.out.println(test); |
| --j; |
| } |
| i++; |
| } |
| } |
| } |

|  |
| --- |
| public class Quiz31 { |
| public static void main(String[] args) { |
| String test = ""; |
| int i = 2, j = 0, k = 17; |
| test = "-->dog"; |
| while (i< 7){ |
| k-=1; |
| j = k; |
| while (j > 12 ){ |
| if (j % 2 == 0){ |
| test += "<--"; |
| test = test + i + (j / 2); |
| }else{ |
| test += "-->"; |
| test = test + (i / 2) + j; |
| } |
| System.out.println(test); |
| --j; |
| } |
| i++; |
| } |
| } |
| } |

|  |
| --- |
| public class Q32 { |
| public static void main(String[] args) { |
| int x = 0, y = 0; |
| int sum = 0; |
| double p; |
| while (x < 10) { |
| y = x / 2; |
| while (y < x) { |
| p = (x + 10.0) / 2; |
| sum = (sum % 2) + x - y \* 2 + (int) p ; |
| System.out.println(sum); |
| y = y + 2; |
| } |
| if (x > 5) { |
| x++; |
| } else { |
| x += 2; |
| } |
| } |
| } |
| } |

|  |
| --- |
| public class Q33 { |
| public static void main(String[] args) { |
| int x = 0, y =0; |
| int sum = 0; |
| double p; |
| while (x < 10) { |
| y = x / 2; |
| while (y < x) { |
| p = (x + 5.0) / 2; |
| sum = (sum % 2) + x - y \* 2 + (int) p ; |
| System.out.println(sum); |
| y = y + 2; |
| } |
| if (x > 5) { |
| x++; |
| } else { |
| x += 2; |
| } |
| } |
| } |
| } |

|  |
| --- |
| public class Q34 { |
| public static void main(String[] args) { |
| int x = 0, p = 0, sum = 0; |
| p = 1; |
| x = 2; |
| double q; |
| sum = 0; |
| while (p < 12){ |
| q = x + p-(sum+5/3)/3.0%2 ; |
| sum = sum + (x++) + (int)q; |
| System.out.println(sum); |
| if (x > 5) |
| p += 4/2; |
| else |
| p += 3%1; |
| } |
| sum = sum + p; |
| System.out.println(sum); |
| } |
| } |

|  |
| --- |
| public class Q35 { |
| public static void main(String[] args) { |
| int test = 1; |
| int j = 0, k = 100; |
| while (k > 0){ |
| while (j < k ){ |
| test = k + j - 21; |
| System.out.println(1 + test / 2 +"32"); |
| j+=10; |
| } |
| k-=10; |
| } |
| } |
| } |

|  |
| --- |
| public class Q36 { |
| public static void main(String[] args) { |
| String test = ""; |
| int i = 5, j = 0, k = 15; |
| while (i< 10) { |
| k-=1; |
| j = k; |
| while (j > 10 ) { |
| if (j % 2 == 0) { |
| test = "<--"; |
| test = test + i + 2 + "-->" + (j / 2); |
| } else { |
| test = "-->"; |
| test = "-->" + (i / 2) + test + j; |
| } |
| System.out.println(test); |
| --j; |
| } |
| i++; |
| } |
| } |
| } |

|  |
| --- |
| public class Q37 { |
| public static void main(String[] args) { |
| boolean var1=false, var2=false, var3=false, var4=false,var5=false; |
| boolean var6=false, result1=false, result2=false, result3=false, result4=false; |
| boolean result5=false, result6=false, result7=false, result8=false; |
| boolean result9=false, result10=false; |
| var1=(!true || true) && false; |
| var2=var1 && false; |
| var3=true && !false; |
| var4=false; |
| var5=true; |
| var6=var3 && false; |
| result1=(var1 && var2) && ( 40 % 3 > 45) || (var5 && var6); |
| result2=(var1 || var2) || (result1 && false); |
| result3=(var1 && result1) || result2 || var5; |
| result4=(var1 || var2) || ((var3 && var1) && false); |
| result5=(var1 && var2) && (result3 || var1); |
| result6=((var3 || !var2) && (result5)) || true; |
| result7=(var4 && result1) && ((result1 && false) || true); |
| result8=((var1 && result3) && (!var5 || var6)) && true; |
| result9=((result2 && var2) || (!result7 && var1)) && !false; |
| result10=!(var1 && true); |
| } |
| } |

Show the values of the result variables in the above program:

|  |  |
| --- | --- |
| result1 |  |
| result2 |  |
| result3 |  |
| result4 |  |
| result5 |  |
| result6 |  |
| result7 |  |
| result8 |  |
| result9 |  |
| result10 |  |

|  |
| --- |
| public class Q38 { |
| public static void main(String[] args) { |
| int x = 0, p =0, sum = 0; |
| p = 1; |
| x = 2; |
| double q; |
| sum = 0; |
| while (p < 12) { |
| q = x + p-(sum+7/3)/3.0%2 ; |
| sum = sum + (x++) + (int)q; |
| System.out.println(sum); |
| if (x > 5) |
| p += 4/2; |
| else |
| p += 3%1; |
| } |
| sum = sum + p; |
| System.out.println(sum); |
| } |
| } |

|  |
| --- |
| public class Q39 { |
| public static void main(String[] args) { |
| int test = 1; |
| int j = 0, k = 100; |
| while (k > 0) { |
| while (j < k ) { |
| test = k - j + 21; |
| System.out.println(1 + test / 2 +"11"); |
| j+=10; |
| } |
| k-=10; |
| } |
| } |
| } |

|  |
| --- |
| public class Q40 { |
| public static void main(String[] args) { |
| String test = ""; |
| int i = 5, j = 0, k = 15; |
| while (i< 10) { |
| k-=1; |
| j = k; |
| while (j > 10 ) { |
| if (j % 2 == 0) { |
| test = "<--"; |
| test = test + i + 3 + "-->" + (j / 3); |
| } else { |
| test = "-->"; |
| test = "-->" + (i / 3) + test + j ; |
| } |
| System.out.println(test); |
| --j; |
| } |
| i++; |
| } |
| } |
| } |

|  |
| --- |
| public class Q41 { |
| public static void main(String[] args) { |
| boolean var1=false, var2=false, var3=false, var4=false,var5=false; |
| boolean var6=false, result1=false, result2=false, result3=false, result4=false; |
| boolean result5=false, result6=false, result7=false, result8=false; |
| boolean result9=false, result10=false; |
| var1=(!false || false) && true; |
| var2=var1 && true; |
| var3=false && !true; |
| var4=true; |
| var5=false; |
| var6=var3 && true; |
| result1=(var1 && var2) && ( 40 % 3 > 45) || (var5 && var6); |
| result2=(var1 || var2) || (result1 && false); |
| result3=(var1 && result1) || result2 || var5; |
| result4=(var1 || var2) || ((var3 && var1) && false); |
| result5=(var1 && var2) && (result3 || var1); |
| result6=((var3 || !var2) && (result5)) || true; |
| result7=(var4 && result1) && ((result1 && false) || true); |
| result8=((var1 && result3) && (!var5 || var6)) && true; |
| result9=((result2 && var2) || (!result7 && var1)) && !false; |
| result10=!(var1 && true); |
| } |
| } |

Show the values of the result variables in the above program:

|  |  |
| --- | --- |
| result1 |  |
| result2 |  |
| result3 |  |
| result4 |  |
| result5 |  |
| result6 |  |
| result7 |  |
| result8 |  |
| result9 |  |
| result10 |  |

|  |
| --- |
| public class Q42 { |
| public static void main(String[] args) { |
| String test = ""; |
| int i = 0, j = 0, k = 15; |
| test = "<--cat"; |
| while (i< 5){ |
| k-=1; |
| j = k; |
| while (j > 10 ) { |
| if (j % 2 == 0) { |
| test += "-->"; |
| test = test + i + (j / 2); |
| } else { |
| test += "<--"; |
| test = test + (i / 2) + j; |
| } |
| System.out.println(test); |
| if (j == 12) { |
| test = "<--cat"; |
| } |
| --j; |
| } |
| i++; |
| } |
| } |
| } |

|  |
| --- |
| public class Q43 { |
| public static void main(String[] args) { |
| String test = ""; |
| int i = 2, j = 0, k = 17; |
| test = "-->dog"; |
| while (i< 7) { |
| k-=1; |
| j = k; |
| while (j > 12 ) { |
| if (j % 2 == 0) { |
| test += "<--"; |
| test = test + i + (j / 2); |
| } else { |
| test += "-->"; |
| test = test + (i / 2) + j; |
| } |
| System.out.println(test); |
| if (j == 14) { |
| test = "-->dog"; |
| } |
| --j; |
| } |
| i++; |
| } |
| } |
| } |

|  |
| --- |
| public class Q44 { |
| public static void main(String[] args) { |
| int x = 0, y =0; |
| int sum = 0; |
| double p; |
| while (x < 10) { |
| y = x / 2; |
| while (y < x) { |
| p = (x + 10.0) / 2; |
| sum = (sum % 2) + x - y \* 2 + (int) p ; |
| System.out.println(sum); |
| y = y + 2; |
| } |
| if (x > 5) { |
| x++; |
| } else { |
| x += 2; |
| } |
| } |
| } |
| } |

|  |
| --- |
| public class Q45 { |
| public static void main(String[] args) { |
| int x = 0, y =0; |
| int sum = 0; |
| double p; |
| while (x < 10) { |
| y = x / 2; |
| while (y < x) { |
| p = (x + 5.0) / 2; |
| sum = (sum % 2) + x - y \* 2 + (int) p ; |
| System.out.println(sum); |
| y = y + 2; |
| } |
| if (x > 5) { |
| x++; |
| } else { |
| x += 2; |
| } |
| } |
| } |
| } |