|  |  |
| --- | --- |
|  | **public class Q3a** |
|  | **{** |
|  | **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); } }** |

Line 10: while (p < 12){

Line 10: while (1 < 12){

condition true, going inside while

Line 11: q = x + p-(sum+5/3)/3.0%2 ;

Line 11: q = 2 + 1-(0+5/3)/3.0%2;

Line 11: q = 2 + 1-(0+1)/3.0%2;

Line 11: q = 2 + 1-1/3.0%2;

Line 11: q = 2 + 1-0.3333333333333333%2;

Line 11: q = 2 + 1-0.3333333333333333;

Line 11: q = 3-0.3333333333333333;

Line 11: q = 2.6666666666666665;

Line 12: sum = sum + (x++) + (int)q;

Line 12: sum = sum + 2 + (int)2.6666666666666665;

Line 12: sum = 2 + 2;

Line 12: sum = 4;

x was 3 becomes 4

Line 13: OUTPUT IS, SUM=4

Line 14: if (x > 5)

Line 14: if (3 > 5)

condition false, executing ELSE part

Line 17: p += 3%1;

Line 17: p += 0;

p was 1 becomes 1

Line 10: while (p < 12){

Line 10: while (1 < 12){

condition true, going inside while

Line 11: q = x + p-(sum+5/3)/3.0%2 ;

Line 11: q = 3 + 1-(4+5/3)/3.0%2;

Line 11: q = 3 + 1-(4+1)/3.0%2;

Line 11: q = 3 + 1-5/3.0%2;

Line 11: q = 3 + 1-1.6666666666666667%2;

Line 11: q = 3 + 1-1.6666666666666667;

Line 11: q = 4-1.6666666666666667;

Line 11: q = 2.333333333333333;

Line 12: sum = sum + (x++) + (int)q;

Line 12: sum = sum + 3 + (int)2.333333333333333;

Line 12: sum = 7 + 2;

Line 12: sum = 9;

x was 4 becomes 5

Line 13: OUTPUT IS, SUM=9

Line 14: if (x > 5)

Line 14: if (4 > 5)

condition false, executing ELSE part

Line 17: p += 3%1;

Line 17: p += 0;

p was 1 becomes 1

Line 10: while (p < 12){

Line 10: while (1 < 12){

condition true, going inside while

Line 11: q = x + p-(sum+5/3)/3.0%2 ;

Line 11: q = 4 + 1-(9+5/3)/3.0%2;

Line 11: q = 4 + 1-(9+1)/3.0%2;

Line 11: q = 4 + 1-10/3.0%2;

Line 11: q = 4 + 1-3.3333333333333335%2;

Line 11: q = 4 + 1-1.3333333333333335;

Line 11: q = 5-1.3333333333333335;

Line 11: q = 3.6666666666666665;

Line 12: sum = sum + (x++) + (int)q;

Line 12: sum = sum + 4 + (int)3.6666666666666665;

Line 12: sum = 13 + 3;

Line 12: sum = 16;

x was 5 becomes 6

Line 13: OUTPUT IS, SUM=16

Line 14: if (x > 5)

Line 14: if (5 > 5)

condition false, executing ELSE part

Line 17: p += 3%1;

Line 17: p += 0;

p was 1 becomes 1

Line 10: while (p < 12){

Line 10: while (1 < 12){

condition true, going inside while

Line 11: q = x + p-(sum+5/3)/3.0%2 ;

Line 11: q = 5 + 1-(16+5/3)/3.0%2;

Line 11: q = 5 + 1-(16+1)/3.0%2;

Line 11: q = 5 + 1-17/3.0%2;

Line 11: q = 5 + 1-5.666666666666667%2;

Line 11: q = 5 + 1-1.666666666666667;

Line 11: q = 6-1.666666666666667;

Line 11: q = 4.333333333333333;

Line 12: sum = sum + (x++) + (int)q;

Line 12: sum = sum + 5 + (int)4.333333333333333;

Line 12: sum = 21 + 4;

Line 12: sum = 25;

x was 6 becomes 7

Line 13: OUTPUT IS, SUM=25

Line 14: if (x > 5)

Line 14: if (6 > 5)

condition true, executing IF part

Line 16: p += 4/2;

Line 16: p += 2;

p was 1 becomes 3

Line 10: while (p < 12){

Line 10: while (3 < 12){

condition true, going inside while

Line 11: q = x + p-(sum+5/3)/3.0%2 ;

Line 11: q = 6 + 3-(25+5/3)/3.0%2;

Line 11: q = 6 + 3-(25+1)/3.0%2;

Line 11: q = 6 + 3-26/3.0%2;

Line 11: q = 6 + 3-8.666666666666666%2;

Line 11: q = 6 + 3-0.6666666666666661;

Line 11: q = 9-0.6666666666666661;

Line 11: q = 8.333333333333334;

Line 12: sum = sum + (x++) + (int)q;

Line 12: sum = sum + 6 + (int)8.333333333333334;

Line 12: sum = 31 + 8;

Line 12: sum = 39;

x was 7 becomes 8

Line 13: OUTPUT IS, SUM=39

Line 14: if (x > 5)

Line 14: if (7 > 5)

condition true, executing IF part

Line 16: p += 4/2;

Line 16: p += 2;

p was 3 becomes 5

Line 10: while (p < 12){

Line 10: while (5 < 12){

condition true, going inside while

Line 11: q = x + p-(sum+5/3)/3.0%2 ;

Line 11: q = 7 + 5-(39+5/3)/3.0%2;

Line 11: q = 7 + 5-(39+1)/3.0%2;

Line 11: q = 7 + 5-40/3.0%2;

Line 11: q = 7 + 5-13.333333333333334%2;

Line 11: q = 7 + 5-1.333333333333334;

Line 11: q = 12-1.333333333333334;

Line 11: q = 10.666666666666666;

Line 12: sum = sum + (x++) + (int)q;

Line 12: sum = sum + 7 + (int)10.666666666666666;

Line 12: sum = 46 + 10;

Line 12: sum = 56;

x was 8 becomes 9

Line 13: OUTPUT IS, SUM=56

Line 14: if (x > 5)

Line 14: if (8 > 5)

condition true, executing IF part

Line 16: p += 4/2;

Line 16: p += 2;

p was 5 becomes 7

Line 10: while (p < 12){

Line 10: while (7 < 12){

condition true, going inside while

Line 11: q = x + p-(sum+5/3)/3.0%2 ;

Line 11: q = 8 + 7-(56+5/3)/3.0%2;

Line 11: q = 8 + 7-(56+1)/3.0%2;

Line 11: q = 8 + 7-57/3.0%2;

Line 11: q = 8 + 7-19.0%2;

Line 11: q = 8 + 7-1.0;

Line 11: q = 15-1.0;

Line 11: q = 14.0;

Line 12: sum = sum + (x++) + (int)q;

Line 12: sum = sum + 8 + (int)14.0;

Line 12: sum = 64 + 14;

Line 12: sum = 78;

x was 9 becomes 10

Line 13: OUTPUT IS, SUM=78

Line 14: if (x > 5)

Line 14: if (9 > 5)

condition true, executing IF part

Line 16: p += 4/2;

Line 16: p += 2;

p was 7 becomes 9

Line 10: while (p < 12){

Line 10: while (9 < 12){

condition true, going inside while

Line 11: q = x + p-(sum+5/3)/3.0%2 ;

Line 11: q = 9 + 9-(78+5/3)/3.0%2;

Line 11: q = 9 + 9-(78+1)/3.0%2;

Line 11: q = 9 + 9-79/3.0%2;

Line 11: q = 9 + 9-26.333333333333332%2;

Line 11: q = 9 + 9-0.33333333333333215;

Line 11: q = 18-0.33333333333333215;

Line 11: q = 17.666666666666668;

Line 12: sum = sum + (x++) + (int)q;

Line 12: sum = sum + 9 + (int)17.666666666666668;

Line 12: sum = 87 + 17;

Line 12: sum = 104;

x was 10 becomes 11

Line 13: OUTPUT IS, SUM=104

Line 14: if (x > 5)

Line 14: if (10 > 5)

condition true, executing IF part

Line 16: p += 4/2;

Line 16: p += 2;

p was 9 becomes 11

Line 10: while (p < 12){

Line 10: while (11 < 12){

condition true, going inside while

Line 11: q = x + p-(sum+5/3)/3.0%2 ;

Line 11: q = 10 + 11-(104+5/3)/3.0%2;

Line 11: q = 10 + 11-(104+1)/3.0%2;

Line 11: q = 10 + 11-105/3.0%2;

Line 11: q = 10 + 11-35.0%2;

Line 11: q = 10 + 11-1.0;

Line 11: q = 21-1.0;

Line 11: q = 20.0;

Line 12: sum = sum + (x++) + (int)q;

Line 12: sum = sum + 10 + (int)20.0;

Line 12: sum = 114 + 20;

Line 12: sum = 134;

x was 11 becomes 12

Line 13: OUTPUT IS, SUM=134

Line 14: if (x > 5)

Line 14: if (11 > 5)

condition true, executing IF part

Line 16: p += 4/2;

Line 16: p += 2;

p was 11 becomes 13

Line 10: while (p < 12){

Line 10: while (13 < 12){

condition false, going outside while

Line 19: sum = sum + p;

Line 19: sum = 134 + 13;

Line 19: sum = 147;

Line 20: OUTPUT IS, SUM=147