class Test1

{

public static void main(String[] args)

{

System.out.println("main begin");

for(int i = 10; i >= 1; i = i - 3)

{

System.out.println("loop body:" + i);

}

System.out.println("main end:");

}

}

===

class Test2

{

public static void main(String[] args)

{

System.out.println("main begin");

for(int i = 1; i <= 5; i++)

{

System.out.println("loop body:" + i);

}

System.out.println("main end:" + i);

}

}

===

class Test3

{

public static void main(String[] args)

{

System.out.println("main begin");

for(int i = 10; i <= 5; i++)

{

System.out.println("loop body:" + i);

}

System.out.println("main end");

}

}

===

class Test3

{

public static void main(String[] args)

{

System.out.println("main begin");

for(int i = 1; i <= 5; i++)

{

System.out.println("loop body:" + i);

System.out.println("loop body:" + i);

int j = 20;

j++;

j += 20;

System.out.println("--------------:" + j);

}

System.out.println("main end");

}

}

===

class Test4

{

public static void main(String[] args)

{

System.out.println("main begin");

for(int i = 1; i <= 5; i++)

{

System.out.println("loop body:" + i);

}

System.out.println("main end");

}

}

===

class Test5

{

public static void main(String[] args)

{

System.out.println("main begin");

for(int i = 10; i >= 1; i--)

{

System.out.println("loop body:" + i);

}

System.out.println("main end:");

}

}

===

class Test6

{

public static void main(String[] args)

{

System.out.println("main begin");

for(int i = 1; i <= 10; i += 2)

{

System.out.println("loop body:" + i);

}

System.out.println("main end:");

}

}

===

class Test7

{

public static void main(String[] args)

{

System.out.println("main begin");

int i = 1;

for( ; ; )

{

System.out.println("loop body:" + i);

i++;

}

}

}

========

class Test8

{

public static void main(String[] args)

{

System.out.println("main begin");

for(int i = 10; i >= 1; i -= 3)

{

System.out.println("loop body:" + i);

}

System.out.println("main end:");

}

}

=====

class Test9

{

public static void main(String[] args)

{

System.out.println("main begin");

for(int i = 1; i <= 50; i = i \* 5)

{

System.out.println("loop body:" + i);

}

System.out.println("main end:");

}

}

===

class Test10

{

public static void main(String[] args)

{

System.out.println("main begin");

for(int i = 5000; i > 0; i = i / 10)

{

System.out.println("loop body:" + i);

}

System.out.println("main end:");

}

}

===

class Test11

{

public static void main(String[] args)

{

System.out.println("main begin");

for(int i = 1; i <= 500; i \*= 3)

{

System.out.println("loop body:" + i);

}

System.out.println("main end:");

}

}

====

class Test12

{

public static void main(String[] args)

{

System.out.println("main begin");

for(int i = 5000; i > 0; i /= 10)

{

System.out.println("loop body:" + i);

}

System.out.println("main end:");

}

}

===

class Test13

{

public static void main(String[] args)

{

System.out.println("main begin");

int i;

for(i = 1; i <= 5; i++)

{

System.out.println("loop body:" + i);

}

System.out.println("main end:" + i);

}

}

===

class Test14

{

public static void main(String[] args)

{

System.out.println("main begin");

int i = 10;

for(i = 1; i <= 5; i++)

{

System.out.println("loop body:" + i);

}

System.out.println("main end:" + i);

}

}

===

class Test15

{

public static void main(String[] args)

{

System.out.println("main begin");

int i = 10;

for( ; i <= 5; i++)

{

System.out.println("loop body:" + i);

}

System.out.println("main end:" + i);

}

}

===

class Test16

{

public static void main(String[] args)

{

System.out.println("main begin");

int i = 1;

for( ; i <= 5; )

{

System.out.println("loop body:" + i ++);

}

System.out.println("main end:" + i);

}

}

===

class Test17

{

public static void main(String[] args)

{

System.out.println("main begin");

int i = 4;

for( ; i <= 5; i++)

{

System.out.println("loop body:" + i);

}

System.out.println("main end:" + i);

}

}

===

class Test18

{

public static void main(String[] args)

{

System.out.println("main begin");

int i = 1;

for( ; ; )

{

System.out.println("loop body:" + i);

i++;

}

System.out.println("main end:" + i);

}

}

===

class Test19

{

public static void main(String[] args)

{

System.out.println("main begin");

int i = 1;

for( ; i <= 5; )

{

System.out.println("loop body:" + i);

i++;

}

System.out.println("main end:" + i);

}

}

===

class Test20

{

public static void main(String[] args)

{

System.out.println("main begin");

int i;

for(i = 0; i <= 5; i++);

{

System.out.println("loop body stmt1:" + i);

}

System.out.println("main end");

}

}

===

class Test21

{

public static void main(String[] args)

{

System.out.println("main begin");

for(int i = 1, j = 20 ; i <= 10; i++, j += 3)

{

System.out.println("loop body:" + i + ", " + j);

}

}

}

===

class Test22

{

public static void main(String[] args)

{

System.out.println("main begin");

for(int i = 1, j = 20 ; j <= 60; i++, j += 3)

{

System.out.println("loop body:" + i + ", " + j);

}

}

}

===

class Test23

{

public static void main(String[] args)

{

System.out.println("main begin");

for(int i = 1, j = 20 ; i <= 20 || j <= 60; i++, j += 3)

{

System.out.println("loop body:" + i + ", " + j);

}

}

}

===

class Test24

{

public static void main(String[] args)

{

System.out.println("main begin");

for(int i = 1, j = 20 ; i <= 20 && j <= 20; i++, j += 3)

{

System.out.println("loop body:" + i + ", " + j);

}

}

}

===

class Test25

{

public static void main(String[] args)

{

System.out.println("main begin");

int i;

for(i = 1, System.out.println("init");

test(i);

System.out.println("before change:" + i), i++, System.out.println("after change:" + i))

{

System.out.println("loop body:" + i);

}

System.out.println("main end");

}

static boolean test(int i)

{

boolean flag = (i <= 5);

System.out.println("boolean status for " + i + " is " + flag);

return flag;

}

}

===

class Test26

{

public static void main(String[] args)

{

System.out.println("main begin");

//int m = 1, n = 10, o, p = 30, q, r = 40;

for(int i = 1, System.out.println("init");

test(i);

System.out.println("before change:" + i), i++, System.out.println("after change:" + i))

{

System.out.println("loop body:" + i);

}

System.out.println("main end");

}

static boolean test(int i)

{

boolean flag = (i <= 5);

System.out.println("boolean status for " + i + " is " + flag);

return flag;

}

}

===

class Test27

{

public static void main(String[] args)

{

System.out.println("main begin");

for(int i = 0; i <= 5; i++)

System.out.println("loop body:" + i);

System.out.println("loop body:" + i);

System.out.println("main end");

}

}

===

class Test28

{

public static void main(String[] args)

{

System.out.println("main begin");

int i;

for(i = 0; i <= 5; i++)

System.out.println("loop body stmt1:" + i);

System.out.println("loop body stmt2:" + i);

System.out.println("main end");

}

}

===

class Test29

{

public static void main(String[] args)

{

System.out.println("main begin");

for(int i = 0; i <= 5; i++);

{

System.out.println("loop body stmt1:" + i);

}

System.out.println("main end");

}

}

===

class Test30

{

public static void main(String[] args)

{

System.out.println("main begin");

for(int i = 0; i <= 5; i++);

System.out.println("loop body stmt1:" + i);

System.out.println("main end");

}

}

====

class Test31

{

public static void main(String[] args)

{

System.out.println("main begin");

for(int i = 1; i <= 10; i++)

{

System.out.println("outer loop begin:" + i);

for(int j = 101; j <= 105; j++)

{

System.out.println("inner loop begin:" + i + "," + j);

System.out.println("inner loop end:" + i + "," + j);

}

System.out.println("outer loop end:" + i);

}

System.out.println("main end");

}

}

===

class Test32

{

public static void main(String[] args)

{

System.out.println("main begin");

for(int i = 1; i <= 10; i++)

{

System.out.println("loop begin:" + i);

System.out.println("loop end:" + i);

}

System.out.println("main end");

}

}

===

class Test33

{

public static void main(String[] args)

{

System.out.println("main begin");

for(int i = 1; i <= 10; i++)

{

System.out.println("loop begin:" + i);

if(i == 7)

{

continue;

}

System.out.println("loop end:" + i);

}

System.out.println("main end");

}

}

===

class Test34

{

public static void main(String[] args)

{

System.out.println("main begin");

for(int i = 1; i <= 10; i++)

{

System.out.println("loop begin:" + i);

if(i <= 4)

{

continue;

}

System.out.println("loop end:" + i);

}

System.out.println("main end");

}

}

===

class Test35

{

public static void main(String[] args)

{

System.out.println("main begin");

for(int i = 1; i <= 10; i++)

{

System.out.println("loop begin:" + i);

if(i <= 4)

{

System.out.println("if begin");

continue;

}

System.out.println("loop end:" + i);

}

System.out.println("main end");

}

}

===

class Test36

{

public static void main(String[] args)

{

System.out.println("main begin");

for(int i = 1; i <= 10; i++)

{

System.out.println("loop begin:" + i);

if(i <= 4)

{

continue;

System.out.println("if end");

}

System.out.println("loop end:" + i);

}

System.out.println("main end");

}

}

===

class Test37

{

public static void main(String[] args)

{

System.out.println("main begin");

for(int i = 1; i <= 10; i++)

{

System.out.println("loop begin:" + i);

if(i == 4)

{

System.out.println("if begin");

break;

i++;

}

System.out.println("loop end:" + i);

}

System.out.println("main end");

}

}

===

class Test38

{

public static void main(String[] args)

{

System.out.println("main begin");

for(int i = 1; i <= 10; i++)

{

System.out.println("loop begin:" + i);

if(i == 4)

{

System.out.println("if begin");

break;

}

System.out.println("loop end:" + i);

}

System.out.println("main end");

}

}

===

class Test39

{

public static void main(String[] args)

{

System.out.println("main begin");

for(int i = 1; i <= 10; i++)

{

System.out.println("loop begin:" + i);

if(i == 4)

{

System.out.println("if begin");

break;continue;

}

System.out.println("loop end:" + i);

}

System.out.println("main end");

}

}

===

class Test40

{

public static void main(String[] args)

{

System.out.println("main begin");

for(int i = 1; i <= 10; i++)

{

System.out.println("outer loop begin:" + i);

for(int j = 101; j <= 105; j++)

{

System.out.println("inner loop begin:" + i + "," + j);

}

System.out.println("outer loop end:" + i);

}

System.out.println("main end");

}

}

===

class Test41

{

public static void main(String[] args)

{

System.out.println("main begin");

for(int i = 1; i <= 10; i++)

{

System.out.println("outer loop begin:" + i);

for(int j = 101; j <= 105; j++)

{

System.out.println("inner loop begin:" + i + "," + j);

}

System.out.println("outer loop end:" + i);

}

System.out.println("main end");

}

}

===

class Test42

{

public static void main(String[] args)

{

System.out.println("main begin");

double[] elements = {1.2, 4.5, 7.0};

double element;

for(element : elements)

{

System.out.println(element);

}

System.out.println("main end");

}

}

===

class Test43

{

public static void main(String[] args)

{

System.out.println("main begin");

for(int i = 1; i <= 10; i++)

{

System.out.println("outer loop begin:" + i);

for(int j = 101; j <= 105; j++)

{

System.out.println("inner loop begin:" + i + "," + j);

if(j == 103)

{

continue;

}

System.out.println("inner loop end:" + i + "," + j);

}

System.out.println("outer loop end:" + i);

}

System.out.println("main end");

}

}

===

class Test44

{

public static void main(String[] args)

{

System.out.println("main begin");

for(int i = 1; i <= 10; i++)

{

System.out.println("outer loop begin:" + i);

for(int j = 101; j <= 105; j++)

{

System.out.println("inner loop begin:" + i + "," + j);

if(j == 103)

{

break;

}

System.out.println("inner loop end:" + i + "," + j);

}

System.out.println("outer loop end:" + i);

}

System.out.println("main end");

}

}

===

class Test45

{

public static void main(String[] args)

{

System.out.println("main begin");

loop1:

for(int i = 1; i <= 10; i++)

{

System.out.println("outer loop begin:" + i);

loop2:

for(int j = 101; j <= 105; j++)

{

System.out.println("inner loop begin:" + i + "," + j);

if(j == 103)

{

break loop2;

}

System.out.println("inner loop end:" + i + "," + j);

}

System.out.println("outer loop end:" + i);

}

System.out.println("main end");

}

}

===

class Test46

{

public static void main(String[] args)

{

System.out.println("main begin");

loop1:

for(int i = 1; i <= 10; i++)

{

System.out.println("outer loop begin:" + i);

loop2:

for(int j = 101; j <= 105; j++)

{

System.out.println("inner loop begin:" + i + "," + j);

if(j == 103)

{

break loop1;

}

System.out.println("inner loop end:" + i + "," + j);

}

System.out.println("outer loop end:" + i);

}

System.out.println("main end");

}

}

===

class Test47

{

public static void main(String[] args)

{

System.out.println("main begin");

int[] elements = {10, 30, 20, 70, 35, 28};

for(int element : elements) //for-each (JDK1.5)

{

System.out.println(element);

}

System.out.println("main end");

}

}

===

class Test48

{

public static void main(String[] args)

{

System.out.println("main begin");

loop1:

for(int i = 1; i <= 10; i++)

{

System.out.println("outer loop begin:" + i);

loop2:

for(int j = 101; j <= 105; j++)

{

System.out.println("inner loop begin:" + i + "," + j);

if(j == 103)

{

continue loop1;

}

System.out.println("inner loop end:" + i + "," + j);

}

System.out.println("outer loop end:" + i);

}

System.out.println("main end");

}

}

===

class Test49

{

public static void main(String[] args)

{

System.out.println("main begin");

String[] elements = {"hello", "test", "123", "567", "true", "#$%"};

for(String element : elements)

{

System.out.println(element);

}

System.out.println("main end");

}

}

===

class Test50

{

public static void main(String[] args)

{

System.out.println("main begin");

double[] elements = {1.2, 4.5, 7.0};

for(int element : elements)

{

System.out.println(element);

}

System.out.println("main end");

}

}

=========================================

class Test51

{

public static void main(String[] args)

{

System.out.println("main begin");

int i = 1;

while(i++ <= 5);

System.out.println("loop begin:" + i);

System.out.println("loop end:" + i);

i++;

System.out.println("main end:" + i);

}

}

===

class Test52

{

public static void main(String[] args)

{

System.out.println("main begin");

int i = 1;

while(i <= 5)

{

System.out.println("loop begin:" + i);

System.out.println("loop end:" + i);

i++;

}

System.out.println("main end:" + i);

}

}

===

class Test53

{

public static void main(String[] args)

{

System.out.println("main begin");

int i = 10;

while(i <= 5)

{

System.out.println("loop begin:" + i);

System.out.println("loop end:" + i);

i++;

}

System.out.println("main end:" + i);

}

}

===

class Test54

{

public static void main(String[] args)

{

System.out.println("main begin");

int i = 1;

while(i <= 5);

{

System.out.println("loop begin:" + i);

System.out.println("loop end:" + i);

i++;

}

System.out.println("main end:" + i);

}

}

===

class Test55

{

public static void main(String[] args)

{

System.out.println("main begin");

int i = 1;

while(i++ <= 5)

{

System.out.println("loop begin:" + i);

System.out.println("loop end:" + i);

}

System.out.println("main end:" + i);

}

}

===

class Test56

{

public static void main(String[] args)

{

System.out.println("main begin");

int i = 1;

while(i <= 5)

System.out.println("loop begin:" + i);

System.out.println("loop end:" + i);

i++;

System.out.println("main end:" + i);

}

}

===

class Test58

{

public static void main(String[] args)

{

System.out.println("main begin");

int i = 1;

while(i++ <= 5);

{

System.out.println("loop begin:" + i);

System.out.println("loop end:" + i);

}

System.out.println("main end:" + i);

}

}

===

class Test59

{

public static void main(String[] args)

{

System.out.println("main begin");

int i = 1;

while(i <= 5)

System.out.println("loop begin:" + i++);

System.out.println("loop end:" + i);

i++;

System.out.println("main end:" + i);

}

}

===

class Test60

{

public static void main(String[] args)

{

System.out.println("main begin");

int i = 1;

while(i++ <= 5)

System.out.println("loop begin:" + i);

System.out.println("loop end:" + i);

i++;

System.out.println("main end:" + i);

}

}

===

class Test61

{

public static void main(String[] args)

{

System.out.println("main begin");

do

{

int i = 1;

System.out.println("body begin:" + i);

System.out.println("body end:" + i);

i++;

}

while (i <= 5);

System.out.println("main end");

}

}

===

class Test62

{

public static void main(String[] args)

{

System.out.println("main begin");

int i = 1;

while(i <= 5)

{

System.out.println("loop begin:" + i);

if(i == 3)

{

continue;

}

System.out.println("loop end:" + i);

i++;

}

System.out.println("main end:" + i);

}

}

===

class Test63

{

public static void main(String[] args)

{

System.out.println("main begin");

int i = 1;

while(i <= 5)

{

System.out.println("loop begin:" + i);

if(i == 3)

{

i++;

continue;

}

System.out.println("loop end:" + i);

i++;

}

System.out.println("main end:" + i);

}

}

===

class Test64

{

public static void main(String[] args)

{

System.out.println("main begin");

int i = 1;

while(i <= 5)

{

System.out.println("loop begin:" + i);

if(i == 3)

{

break;

}

System.out.println("loop end:" + i);

i++;

}

System.out.println("main end:" + i);

}

}

===

class Test65

{

public static void main(String[] args)

{

System.out.println("main begin");

int i = 1;

while(i <= 5)

{

System.out.println("loop begin:" + i);

for(int j = 101; j <= 103; j++)

{

System.out.println("inner loop begin " + i + ", " + j);

if(j == 102)

{

break;

}

System.out.println("inner loop end " + i + ", " + j);

}

System.out.println("loop end:" + i);

i++;

}

System.out.println("main end:" + i);

}

}

===

class Test66

{

public static void main(String[] args)

{

System.out.println("main begin");

int i = 1;

while(i <= 5)

{

System.out.println("loop begin:" + i);

for(int j = 101; j <= 103; j++)

{

System.out.println("inner loop begin " + i + ", " + j);

System.out.println("inner loop end " + i + ", " + j);

}

System.out.println("loop end:" + i);

i++;

}

System.out.println("main end:" + i);

}

}

===

class Test67

{

public static void main(String[] args)

{

System.out.println("main begin");

int i = 1;

while(i <= 5)

{

System.out.println("loop begin:" + i);

for(int j = 101; j <= 103; j++)

{

System.out.println("inner loop begin " + i + ", " + j);

if(j == 102)

{

continue;

}

System.out.println("inner loop end " + i + ", " + j);

}

System.out.println("loop end:" + i);

i++;

}

System.out.println("main end:" + i);

}

}

===

class Test68

{

public static void main(String[] args)

{

System.out.println("main begin");

int i = 1;

abc:

while(i <= 5)

{

System.out.println("loop begin:" + i);

for(int j = 101; j <= 103; j++)

{

System.out.println("inner loop begin " + i + ", " + j);

if(j == 102)

{

i++;

continue abc;

}

System.out.println("inner loop end " + i + ", " + j);

}

System.out.println("loop end:" + i);

i++;

}

System.out.println("main end:" + i);

}

}

===

class Test69

{

public static void main(String[] args)

{

System.out.println("main begin");

int i = 1;

abc:

while(i <= 5)

{

System.out.println("loop begin:" + i);

for(int j = 101; j <= 103; j++)

{

System.out.println("inner loop begin " + i + ", " + j);

if(j == 102)

{

continue abc;

}

System.out.println("inner loop end " + i + ", " + j);

}

System.out.println("loop end:" + i);

i++;

}

System.out.println("main end:" + i);

}

}

===

class Test70

{

public static void main(String[] args)

{

System.out.println("main begin");

int i = 1;

abc:

while(i <= 5)

{

System.out.println("loop begin:" + i);

for(int j = 101; j <= 103; j++)

{

System.out.println("inner loop begin " + i + ", " + j);

if(j == 102)

{

break abc;

}

System.out.println("inner loop end " + i + ", " + j);

}

System.out.println("loop end:" + i);

i++;

}

System.out.println("main end:" + i);

}

}

===

class Test71

{

public static void main(String[] args)

{

System.out.println("main begin");

int i = 1;

do

{

System.out.println("body begin:" + i);

System.out.println("body end:" + i);

i++;

}

while (i <= 5);

System.out.println("main end");

}

}

===

class Test72

{

public static void main(String[] args)

{

System.out.println("main begin");

int i = 1;

do

{

System.out.println("body begin:" + i);

System.out.println("body end:" + i);

i++;

}

while (i <= 5)

System.out.println("main end");

}

}

===

class Test73

{

public static void main(String[] args)

{

System.out.println("main begin");

int i = 10;

do

{

System.out.println("body begin:" + i);

System.out.println("body end:" + i);

i++;

}

while (i <= 5);

System.out.println("main end");

}

}

===