```
9
10 break:
11 -----
12 1. inside switch to stop fall through
13 2. inside loops to break loop execution based on some condition
14 3. we can use inside labeled blocks to break block execution
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
```

Labelled bloack

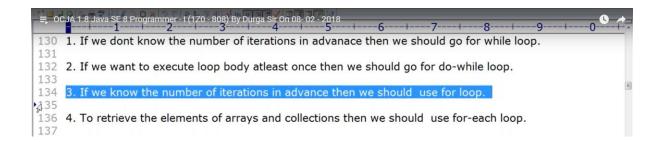
```
class Test
 2¤{
3
       public static void main(String[] args)
 48
 5
         int x=10;
 6
         System.out.println("Hello");
 7
8 <sup>B</sup>
         11: I
 9
            System.out.println("Begin");
10 □
            if(x==10)
11
               break 11;
            System.out.println("End");
12
13
14
         System.out.println("Hi");
15
16 }
```

Instance block – Static block are executed as soon as the class Is loaded

Instance block gets executed as soon as the object is created declared inside class. Labelled block declared inside methods.

```
-6---+---9---+--
                                                                                                                                                                  -0---+
                                                                                                                                                                               1 class Test
   2 □ {
   3
            static
   4
   6
            {
                                                                                                                      Show Answered Question
   7
   8
                                                                                                                       ls
hello,begin,hai
hello Begin Hi
Hello Begin Hi
hello begin infinite times
hello begin infinite times
hello begin infinite times
Hello Begin Hi
Hello Begin Hi
Hello Begin Hi
Hello Begin Hi
os their any difference bewee
                                                                                                                                                Sai chand Kilari
RAMESWARA REDDY
   9
            public static void main(String[] args)
  10 ₪
                                                                                                                                                Kalyan TC
                                                                                                                                                Kalyan TC
Pooja Chavan
john acharya
Govindu Rayapui
Deepankaj Yadav
Kalyan TC
  11
                int x=10;
  12
                System.out.println("Hello");
  13
                11:
                                                                                                                                                Shubham Gupta
  148
  15
                     System.out.println("Begin");
                                                                                                                      Good evening sir
  16 □
                    if(x==10)
                        break I1;
  17
                     System.out.println("End");
  18
                                                                                                                      A Send Privately A Send to All
                                                                                                                                                               0
  19
  20
                System.out.println("Hi");
 21
           }
 22 }
120
     ◆ Untitled1 🐰 ◆ Untitled2 🐰 ◆ Test.java 🐸
For Help, press F1
```

Continue can be used only inside loops. Continue skips the current iteration and moves to the next. Based on condition skip the iteration



```
public class Test
 2 □ {
 3
     public static void main(String[] args)
 48
 6
       while(isAvailable(i))
 7 □
 8
         System.out.print(i);//Line-1
 9
        //Line-2
10
       }
11
12
     public static boolean isAvailable(int i)
13 □
14
       return i-- > 0 ? true : false;// Line-3
15
16 }
17
18 Which modification enables the code to print 54321
19
20 A) Replace Line-1 with System.out.print(--i);
21 B) At Line-2, insert i--;
22 C) Replace Line-1 with --i; and , at Line-2 insert System.out.print(i);
```

12 3. See in while loop they have given <length-1 not <=length-1

```
public class Test
       public static void main(String[] args)
 48
 5
          int[] x = \{1,2,3,4\};
          int i =0;
  6
  7
          do
  8 =
 9
             System.out.print(x[i]+" ");
10
11
          while (i<x.length -1);
12
13
14 }
```

```
1 class Test
2 = {
3 public et
       public static void main(String[] args)
 48
          for(int i =0; i<10;i++)
 5
 6 □
             if(i\%2==0)
 7 □
               continue;
 8
 9
             System.out.println(i);
10
                        I
11
12 }
13
             a SE 8 Programmer - I (1ZO - 808) By Durga Sir On 08- 02 - 2018
continue;
 1 cla
 2 <sup>□</sup> {
3
        D:\durgaclasses>javac Test.java
 48
        D:\durgaclasses>java Test
 5
 6 □
 7⋴
 8
 9
10
        D:\durgaclasses>
11
12 }
13
```

The condition is x==0 the condition will fail the first time itself after printing 5

```
CJA 1.8 Java SE 8 Programmer - I (1Z0 - 808) By Durga Sir On 08-02 - 2018
 1 public class Test
 2<sup>□</sup>{
3
       public static void main(String[] args)
 48
 5
          int x = 5;
 6
          do
 7 □
          {
             System.out.print(x-- +" ");//51
 8
 9
10
          while (x==0);
11
12 }
       }
```

```
-8----+--
                                                                                                          -0--
                                                                -6--
     public class Test
  2 □ {
  3
        public static void main(String[] args)
  48
  5
          int[][] x = new int[2][4];
          x[0] = new int[]{2,4,6,8};
x[1] = new int[]{2,4};
  6
  8
          for(int[] x1: x)
  9 ₪
 10
             for(int x2:x1)
 118
             {
 12
                System.out.print(x2+" ");
 13
 14
             System.out.println();
 15
 16
        }
 17 } I 18 2468
19 24

    * Untitled1    * Untitled2    * Test.java    * Flow_control_with

For Help, press F1
                                                                                    col 3
                                                                                         19
                                                                                             00 PC
```

```
---+---1---+---8---+--9---+---0---+--
   public class Student
 2 □ {
 3
     String name;
     public Student(String name)
 4
 5 □
        this.name=name;
 8 }
 9 public class Test
10 □ {
     public static void main(String[] args)
11
12 □
13
        Student[] s = new Student[3];
        s[1]= new Student("Durga");
14
       s[2]= new Student("Ravi");
15
16
        for(Student s1: s)
178
18
          System.out.println(s1.name);
19
20
     }
21 }
  ◆ Untitled1 

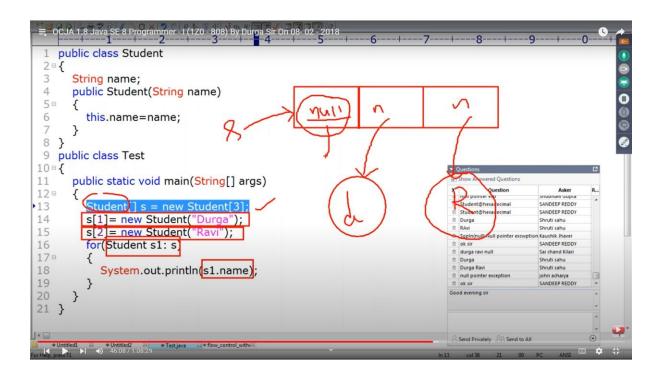
◆ Untitled2 

◆ Test.java 

◆ flow_control_with

◆
```

S[2] is null, null.name compilation error/ null pointer exceptions



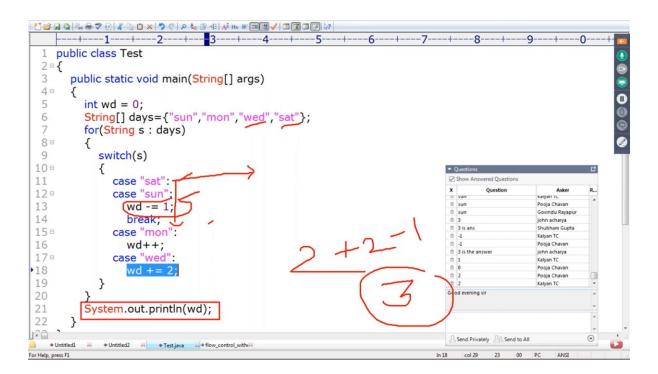
```
261 What is the output?
262 A) Durga
263 Ravi
264 B) Durga
265 Ravi
266 null
267 C) Compilation Fails
268 D) ArrayIndexOutOfBoundsException
269 E) NullPointerException
```

Careful below. After break or continue u can't have any statement directly

As its not reachable at any pt of time. After exit u can as compiler treats exit as a method

```
public class Test
 3
     public static void main(String[] args)
 48
       int[] data={10,20,30,40,50,30};
 6
       int k = 30;
       int count=0;
 8
       for(int x : data)
 9 ₪
10
         if( x! = k)
118
         {
           continue;
12
13
           count++;
14
15
16
       System.out.println(count);
17
18
                                      Ι
```

```
public class Test
 2 □ {
 3
      public static void main(String[] args)
 48
 5
         int[] data={10,20,30,40,50,30};
         int k= 30;
 6
 7
         int count=0;
 8
         for(int x : data)
 9 □
10
            if( x! = k)
118
12
              continue;
13
14
15
            count++;
16
17
         System.out.println(count);
18
19 }
```



```
1 public class Test
 2 □ {
 3
    public static void main(String[] args)
 48
 5
      int[] x = \{1,2,3,4,5\}
 6
      for(yyy)
 7 ₪
 8
       System.out.print(a[i]);
 9
10
11 }
12 Which option can replace yyy to enable the code to print 135?
13
14 A) int i=0;i<=4;i++
15 B) int i=0;i<5;i+=2
16 C) int i=1;i<=5;i++
                         Ι
17 D) int i=1;i<5;i+=2
18
```

24

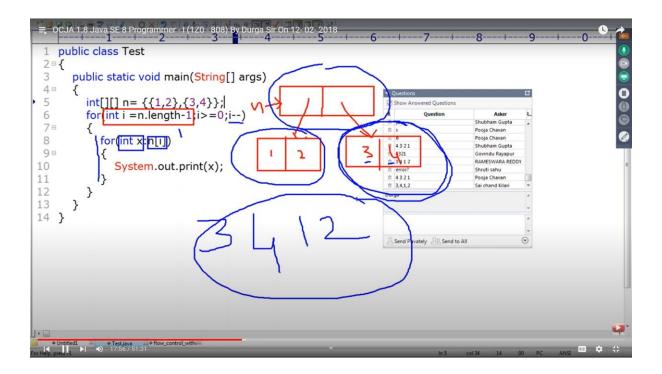
```
1 public class Test
 2 □ {
 3
      public static void main(String[] args)
 48
        String[][] colors=new String[2][2];
        colors[0][0]="red";
colors[0][1]="blue";
        colors[1][0]="green";
colors[1][1]="yellow";
 9
10
11 }
Which code fragment prints red:blue:green:yellow:?
13 A)
14 for(int i=1;i<2;i++)
15 □ {
     for(int j = 1; j < 2; j + +)
16
178
18
        System.out.print(colors[i][j]+":");
19
20 }
20 J
21 B)
22 for(int i=0;i<2;+++)
23 □ {
      for(int j = 0; j < i; ++j)
24
25 ₪
        System.out.print(colors[i][j]+":");
27
28 }
29
30 C)
31 for(String c: colors)
32 □ {
33
      for(String s: sizes)
34 = {
35
        System.out.print(s+":");
36
37 }
39 D)
40 for(int i=0;i<2;)
41 □ {
42
      for(int j = 0; j < 2;)
43 □
44
        System.out.print(colors[i][j]+":");
45
46
47
      i++;
48 }
```

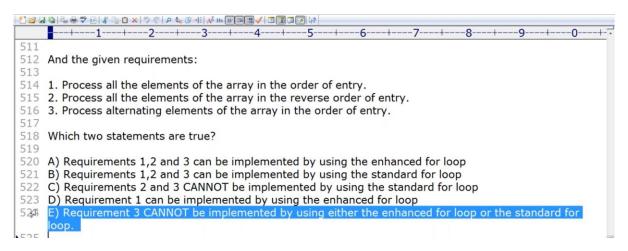
-C- if I value = 2 then that loop is the right

```
CCJA 1.8 Java SE 8 Programmer - I (120 - 808) By Durga Sir On 12-02-2018
  1 public class Test
 2¤{
3
       public static void main(String[] args)
 48
 5
         int[] s={10,20,30};
  6
         int size=3;
         int i =0;
/* Line-1 */
 8
         System.out.println("The Top Element:"+ s[i]);
 9
10
11 }
12 Which code fragment inserted at line-1 ,prints The Top Element: 30 ?
13
14 A)
15 do
16 = {
     i++;
17
18 }
19 while ( i>= size );
20
21 B)
22 while(i<size)
23 = {
24 i++;
25 }
16 C)
18⊟{
19 <sup>I</sup>i++;
20 }
21 while (i<size-1);
22 22 23 D)
24 do
25□{
26 i++;
27 }
28 while (i<= size);
14 E)
15 while(i<= size-1)
16□{
17 i++;
18 }*/
```

0 0 300 400

```
public class Test
 2 4
       public static void main(String[] args)
 48
         int n[];
         n= new int[2];
         n[0]=100;
         n[1]=200;
 8
 9
10
         n = new int[4];
         n[2]=300;
11
12
         n[3]=400;
13
         for(int x : n)
14
15 ₪
            System.out.print(" "+x);
16
17
18
19
```





Be very carefull, in enhanced for loop each I is the value of the array . initiall i=10

X[i]-. X[10] --- Arrayout of bound exception

B and E

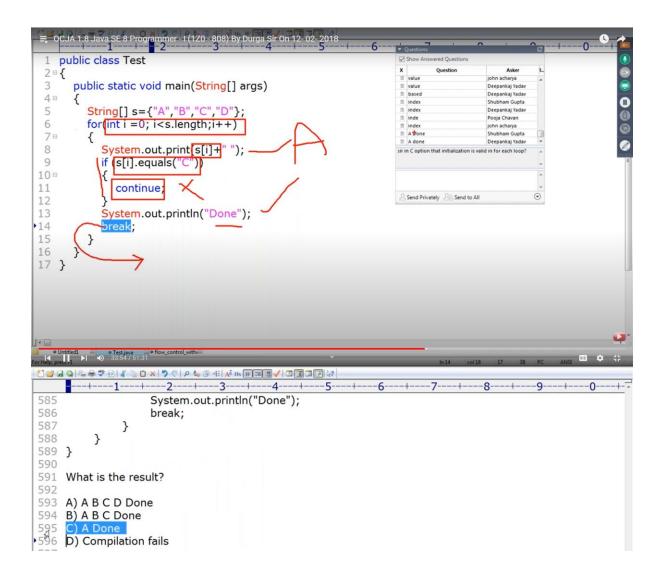
```
526 Q. Given the following array:
527
528 int[] x = \{10,20,30,40,50\};
530 Which two code fragments independently print each element of this array?
531
532 A)
533 for(int i : x)
534 □ {
535
       System.out.print(i+" ");
536 }
537
538 B)
539 for(int i : x)
540 □ {
       System.out.print(i+" ");
```

C is wrong, cant have int i=0 in enhanced for loop

```
541
      System.out.print(i+" ");
542 }
543
544 C)
545 for(int i=0 : x)
546 □ {
      System.out.print(x[i]+" ");
547
548
549 }
550
551 D)
552 for(int i=0; i < x.length; i++)
553⋴{
554
      System.out.print(i+" ");
555 }
556
557 E)
558 for(int i=0; i < x.length; i++)
559⋴{
      System.out.print(x[i]+"");
561 }
563 F)
564 for(int i=1; i < x.length; i++)
565⋴{
566
      System.out.print(x[i]+"");
567 }
568
```

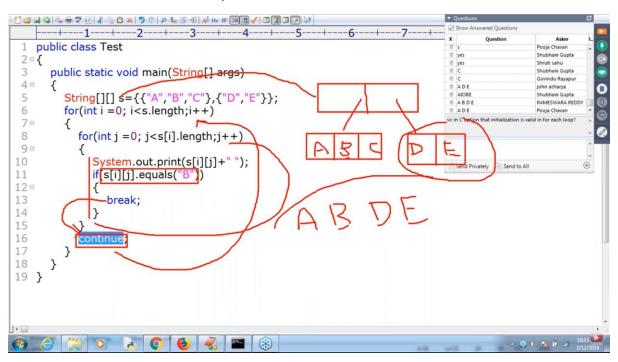
Enhanced for loop is value based. Normal loop is index based

```
-1----+----6----+---7------
                               public class Test
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            invalid
invalid
invalid
invalid
invalid
invalid
inves
inves
inves
inves
inves
inves
invalid
invalid
inves
invalid
inva
            2 □ {
           3
                                                 public static void main(String[] args)
           48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
            5
                                                                   int[] x = \{10,20,30,40,50\};
                                                                                                                                                                                                                                                                                                                                               Jahre bas
            6
                                                                   for( int x1: x)
            7 8
            8
                                                                                     System.out.println(x1);
          9
     10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A Send Privately A Send to All
   11 }
```



ABDE

Be carefull break statement is after print



```
=, OCJA 1.8 Java SE 8 Programmer - I (1Z0 - 808) By Durga Sir On 12-02-2018
   public class Test
 3
       public static void main(String[] args)
 48
 5
         int i = 0;
 6
         int j = 7;
         for(i = 0; i < j-1; i = i+2)
 8 =
 9
            System.out.print(i+" ");
10
11
12
13 }
14
```

```
Α
                                                                                              8 x
     public class Test
                                                                                                 @ 97 98 99 100 null null nul
  2 □ {
                                                                                                                   Shubham Gupta
Pooja Chavan
john acharya
Sai chand Kilari
Pooja Chavan
RAMESWARA REI
  3
        public static void main(String[] args)
  48
                                                                                                                            0
            String[][] s= new String[2][];
                                                                                                                   Shubham Gupta
  6
           s[0] = new String[2];
                                                                                                                   Shubham Gupta
           s[1] = new String[5];
                                                                                                                            0
           int i =9/;
  8
  9
 10
           for (int a = 0; a < s length; a++)
                                                                                                 A Send Privately A Send
 118
 12
               for(int b = 0; b < s.length; b++)
 13 ₪
                 s[a][b]=""+i;
 14
 15
                 i++;
 16
 17
 18
            for( String[] s1: s)
 19 □
 20
               for (String s2: s1)
 21 □
 22
                 System.out.print(s2+"");
 678
 679
 680 }
 681
 682 What is the result?
 683
 684 A)
 685 97 98
 686 99 100 null null null
 687
 688 B)
 689 97 98
 690 99 100 101 102 103
 691
 692 C) Compilation fails
 693
 694 D) NullPointerException is thrown at Runtime
 695
 696 E) ArrayIndexOutOfBoundsException is thrown at Runtime
 697
 698 Q. Consider the following code
 699
       public class Test
```

```
686 99 10
687

688 B)
689 97 98
99 100 null null null
680 00 10
```

Am not performing any operation on null, only printing null

12

```
public static void main(String[] args)
          int[][] x = new int[2][4];
x[0] = new int[]{1,2,3,4};
x[1] = new int[]{1,2};
  8
 9
           for(int[] x1 : x)
 10 □
 11
              for(int x2 : x1)
 12 □
 13
                System.out.print(x2+" ");
 14
 15
              System.out.println();
16
17
•18
```

```
public class Test
 2 · {
      public static void main(String[] args)
 48
        String[][] s= new String[2][];
s[0] = new String[2];
 6
        s[1] = new String[5];
        int i =97;
 8
 9
 10
        for(int a = 0; a < s.length; a++)
 118
          for(int b = 0; b < s.length; b++)
 12
 13 ₪
            s[a][b]=""+i;
 14
            i++;
 15
 16
 17
 18
        for(String[] s1: s)
 19 ₪
20
          for (String s2: s1)
218
22
            System.out.print(s2+"");

    Onitiled1    OTest.java    Oflow_control_withing

For Help, press F1
```