Trace the output of the following programs
[In the following tasks first trace the output of the code by hand then save->compile->run it in Dr. Java to verify your answers]

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    {
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          while (y < 3){
10            sum = (sum % 2) + x - y * 2 ;
11   System.out.println(sum);
12             y = y + 1;
13           }
14         if (x > 5){
15           x++;
16         }else{
17           x += 2;
18         }
19       }
20     }
21   }
```

```
1    public class Q4
2    {
3      public static void main(String args[])
4      {
5    int x = 0, i =0, sum = 0;
6    i = 1;
7        x = 2;
8        sum = 0;
9        while (i< 20){
10         x = x + i;
11         sum = sum + x + 1;
12   System.out.println(sum);
13         if (x > 5)
14   i += 2;
15   else
16   i += 3;
17       }
18       sum = sum + i;
19   System.out.println(sum);
20     }
21   }
```

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

15	`i++;`
16	`}`
17	`}`
18	`}`

1	public class Q6
2	{
3	public static void main(String args[])
4	{
5	int x = 0, p =0, sum = 0;
6	p = 1;
7	x = 2;
8	double q;
9	sum = 0;
10	while (p < 10){
11	q = x + p-(sum+5/3)/3.0%2 ;
12	sum = sum + (x++) + (int)q;
13	System.out.println(sum);
14	if (x > 5)
15	p += 4/2;
16	else
17	p += 3%1;
18	}
19	sum = sum + p;
20	System.out.println(sum);
21	}
22	}

1	`public class Q7`
2	`{`
3	`public static void main(String args[])`
4	`{`
5	`int test = 1;`
6	`int j = 0, k = 100;`
7	`while (k > 0){`
8	`while (j < k ){`
9	`test = k - j + 21;`
10	`System.out.println(1 + test);`
11	`j+=10;`
12	`}`
13	`k-=10;`
14	`}`
15	`}`
16	`}`

1	`public class Q8`

```
2     {
3       public static void main(String args[])
4         {
5     int test = 1;
6     int j = 0, k = 100;
7         while (k > 0){
8           while (j < k ){
9             test = k - j + 11;
10    System.out.println(1 + test / 3 +"12");
11            j+=10;
12          }
13          k-=10;
14        }
15      }
16    }
```

```
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     {
3         public staticvoidmain(String args[])
4         {
5     int x = 0, y =0;
6           String sum = "0";
7           double p;
8     while (x < 9){
9             y = x / 2;
10    while (y < x){
11              p = (x + 5.0) / 2;
12    sum = (sum + 2) + x + "y * 2" + (int) p ;
13    System.out.println(sum);
14              y = y + 1;
15            }
16          x = x + 2;
17          if (x > 5){
18    sum = "2";
```

19	}else{
20	sum += "3";
21	}
22	}
23	}
24	}

1	public class Q11
2	{
3	public static void main(String args[])
4	{
5	String test = "";
6	inti = 1, j = 1, k = 14;
7	test = "-->";
8	while (i< 5){
9	j = --k;
10	while (j > 9){
11	test = i + (j-2) + "-->" + test;
12	System.out.println(test);
13	j--;
14	}
15	i++;
16	}
17	}
18	}

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	}
10	else{
11	System.out.println(r + p);
12	}
13	if(q > 20){
14	System.out.println(r + 19);
15	}
16	else if(q <=6){
17	System.out.println(q + 3);
18	}
19	else{
20	System.out.println(p+q+r);
21	}
22	if (r > 15){
23	System.out.println(r);
24	}

```
25        else if (r == 0){
26  System.out.println(p+q);
27          }
28        else{
29  System.out.println(p);
30       }
31      if(sum != 0){
32  System.out.println(3);
33          }
34        else{
35  System.out.println(sum + 32);
36           }
37          if(p > 0 && r <10){
38  System.out.println(p + r);
39              }
40             else{
41  System.out.println(p-r);
42                  }
43        }
44  }
```

```
1   public class Quiz13
2   {
3     public static void main(String args[])
4      {
5   int x = 0, p =0, sum = 0;
6      p = 1;
7      x = 2;
8      double q;
9      sum = 0;
10     while (p < 10){
11       q =  x + p-(sum+5/3)/3.0%2 ;
12       sum = sum + (x++) + (int)q;
13  System.out.println(sum);
14       if (x > 5)
15         p += 4/2;
16       else
17         p += 3%1;
18     }
19     sum = sum + p;
20  System.out.println(sum);
21    }
22  }
```

```
1   public class Q14
```

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

```
1   public class Q15
2   {
3     public static void main(String args[])
4   {
5   int x = 0, y =0;
6   intsum = 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 Q16
2    {
3      public static void main(String args[])
4      {
5    boolean var1 = false, var2 = false, var3 = false, var4 = false,var5 =
     false;
6    boolean var6 = false, result1 = false, result2 = false, result3 =
     false, result4 = false;
7    boolean result5 = false, result6 = false, result7 = false, result8 =
     false;
8    boolean result9 = false, result10 = false;
9        var1 = 4 > 3 - 1;
10       var2 = var1 && false;
11       var3 = true;
12       var4 = false;
```

13	`        var5 = true;`
14	`        var6 = var3 && false;`
15	`        result1 = (var1 || var2) && (8 * 10 > 45);`
16	`        result2 = (var1 || var2) && (result1 && false);`
17	`        result3 = (var1 && result1) || result2;`
18	`        result4 = (var1 || var2) || ((var3 && var1) && false);`
19	`        result5 = (var1 && var2) && (result3 || var1);`
20	`        result6 = ((var3 || var2) && !(result5)) || true;`
21	`        result7 = (var4 && result1) && ((result1 && false) || true);`
22	`        result8 = ((var1 && result3) && (var5 || var6)) && true;`
23	`        result9 = ((result2 && var2) || (result7 && var1)) && false;`
24	`        result10 = !(var1 && true);`
25	`    }`
26	`}`

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

1	`public class Q18`
2	`{`

3	`  public static void main(String args[])`
4	`{`
5	`int x = 0, y =0;`
6	`intsum = 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 * 3 ;`
13	`       else if ((sum > 40) && (sum < 50))`
14	`         sum = sum + x * 4;`
15	`       else`
16	`         sum = sum + 24;`
17	`System.out.println(sum);`
18	`       y = y - 10;`
19	`}`
20	`    x += 2;`
21	`  }`
22	`  }`
23	`}`

1	`public class Q19`
2	`{`
3	`  public static void main(String args[])`
4	`  {`
5	`boolean var1 = false, var2 = false, var3 = false, var4 = false,var5 = false;`
6	`boolean var6 = false, result1 = false, result2 = false, result3 = false, result4 = false;`
7	`boolean result5 = false, result6 = false, result7 = false, result8 = false;`
8	`boolean result9 = false, result10 = false;`
9	`    var1 = 4 < 3 - 1;`
10	`    var2 = var1 && false;`
11	`    var3 = false;`
12	`    var4 = true;`
13	`    var5 = false;`
14	`    var6 = var3 && true;`
15	`    result1 = (var1 || var2) && (8 * 10 > 45);`
16	`    result2 = (var1 || var2) && (result1 && false);`
17	`    result3 = (var1 && result1) || result2;`
18	`    result4 = (var1 || var2) || ((var3 && var1) && false);`
19	`    result5 = (var1 && var2) && (result3 || var1);`
20	`    result6 = ((var3 || var2) && !(result5)) || true;`
21	`    result7 = (var4 && result1) && ((result1 && false) || true);`
22	`    result8 = ((var1 && result3) && (var5 || var6)) && true;`
23	`    result9 = ((result2 && var2) || (result7 && var1)) && false;`
24	`    result10 = !(var1 && true);`
25	`  }`
26	`}`

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

result1	**false**
result2	**false**
result3	**false**
result4	**false**
result5	**false**

result6	true
result7	false
result8	false
result9	false
result10	true

```
1     public class Q20
2      {
3        public static void main(String args[])
4      {
5      int x = 0, y =0;
6      intsum = 0;
7      while (x < 10){
8            y = x - 3;
9            while (y < 3){
10             sum = x - y * 2 ;
11     System.out.println(sum);
12     y = y + 1;
13           }
14           if (x > 7){
15             x++;
16     }else{
17     x += 3;
18           }
19        }
20        sum = x - y * 2 ;
21     System.out.println(sum);
22       }
23    }
```

```
1     public class Q21
2      {
3        public static void main(String args[])
4      {
5      int x = 0, y =0;
6      intsum = 0;
7      while (x < 10){
8            y = x - 3;
9            while (y < 3){
10             sum = x - y * 3   ;
11     System.out.println(sum);
12     y = y + 1;
13           }
14           if (x > 7){
15             x++;
16     }else{
17     x += 3;
18           }
19        }
20        sum = x - y * 3 ;
21     System.out.println(sum);
22       }
23    }
```

```
1     public class Q22
2      {
```

```
3     public static void main(String args[])
4   {
5   int x = 0, y =0;
6   intsum = 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 Q23
2   {
3     public static void main(String args[])
4   {
5   int x = 0, y =0;
6   intsum = 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 * 3 ;
13          else if ((sum > 40) && (sum < 50))
14            sum = sum + x * 4;
15          else
16            sum = sum + 24;
17  System.out.println(sum);
18          y = y - 10;
19  }
20       x += 2;
21     }
22   }
23 }
```

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

16	else
17	p += 3%1;
18	}
19	sum = sum + p;
20	System.out.println(sum);
21	}
22	}
23	

1	public class Q25
2	{
3	public static void main(String args[])
4	{
5	int test = 1;
6	int j = 0, k = 100;
7	while (k > 0){
8	while (j < k){
9	test = k + j - 21;
10	System.out.println(1 + test / 2 +"32");
11	j+=10;
12	}
13	k-=10;
14	}
15	}
16	}

1	public class Q26
2	{
3	public static void main(String args[])
4	{
5	String test = "";
6	inti = 5, j = 0, k = 15;
7	while (i< 10){
8	k-=1;
9	j = k;
10	while (j > 10){
11	if (j % 2 == 0){
12	test = "<--";
13	test = test + i + 2 + "-->" + (j / 2);
14	}else{
15	test = "-->";
16	test = "-->" + (i / 2) + test + j;
17	}
18	System.out.println(test);
19	--j;
20	}
21	i++;
22	}
23	}
24	}

1	public class Q27
2	{
3	public static void main(String args[])
4	{
5	int x = 0, p =0, sum = 0;
6	p = 1;
7	x = 2;
8	double q;
9	sum = 0;

10	`while (p < 12){`
11	`q =  x + p-(sum+7/3)/3.0%2 ;`
12	`sum = sum + (x++) + (int)q;`
13	`System.out.println(sum);`
14	`if (x > 5)`
15	`p += 4/2;`
16	`else`
17	`p += 3%1;`
18	`}`
19	`sum = sum + p;`
20	`System.out.println(sum);`
21	`}`
22	`}`
23	

```
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 29
{
  public static void main(String args[])
  {
    String test = "";
inti = 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 = "";
inti = 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 = "";
inti = 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;
intsum = 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;
intsum = 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 = "";
inti = 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	false
result2	false
result3	true
result4	false
result5	false
result6	true
result7	false
result8	false
result9	false
result10	true

```
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 = "";
inti = 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	false
result2	true
result3	true
result4	true
result5	true
result6	true
result7	false
result8	true
result9	true
result10	false

```
public class Q42
{
  public static void main(String args[])
  {
    String test = "";
inti = 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
{
```

```java
   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++;
      }
   }
}
```

```java
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;
        }
      }
   }
 }
```

```java
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;
      }
    }
  }
 }
```