

4. Identify errors in the code below and provide the correct version. Otherwise state the output.  
 [Kenapa kod-kod berikut akan menyebabkan ralat pengkompil? Betulkan kod tersebut.]

```

1 public class Town
2 {
3     public static void main(String[] args)
4     {
5         java.util.ArrayList townList = new
6         java.util.ArrayList();
7
8         townList.add("[Kangar,");
9         townList.add("Alor Setar,");
10        townList.add("Sungei Petani,");
11        townList.add("Penang,");
12        townList.add("Kuala Kangsar,");
13        townList.add("Ipoh,");
14        townList.add("Kuala Lumpur]");
15
16        for(int i=0;i<townList.size();i++)
17            System.out.print(townList.get(i)+" ");
18
19        System.out.println();
20    }
21 }
    
```

2. Program 6.1 is an example of ArrayList, where each element is an object of class Circle.  
[Aturcara 6.1 adalah satu contoh ArrayList dimana setiap elemen adalah objek bagi kelas Circle.]

- i. Copy the code, compile and run it. Observe the output.  
[Salin kod, kompil dan laksanakan. Perhatikan output yang tercetak.]
- ii. Insert statement to add additional three(3) Circle objects.  
[Masukkan pernyataan untuk menambah tiga objek Circle.]
- iii. Remove the second element from the list.  
[Singkirkan elemen kedua daripada senarai.]
- iv. Print the information of all elements of the list.  
[Cetak maklumat semua elemen dalam senarai.]
- v. Create another class Rectangle, create 4 objects and add them to the new ArrayList and print the contents of the new list.  
[Ciptakan kelas Rectangle, cipta 4 objek dan masukkan objek-objek tersebut dalam senarai ArrayList baru dan cetak kandungan senarai semasa.]

```
1 //Program 6.1
2 import java.util.ArrayList;
3
4 class Circle
5 {
6
7     private double radius;
8
9     public Circle(double radius)
10    {
11        this.radius = radius;
12    }
13
14    public double getRadius()
15    {
16        return radius;
17    }
18
19    public void setRadius()
20    {
21        this.radius = radius;
22    }
23
24    public double getArea ()
```



```
25     {
26         return (Math.PI*radius*radius);
27     }
28 }
29
30 public class TestCircle
31 {
32     public static void main (String [] args)
33     {
34         ArrayList circList = new ArrayList();
35
36         circList.add(new Circle(2.3));
37         circList.add(new Circle(3.3));
38
39         System.out.printf("The area of the
40
41 circle:%2.2f", ((Circle)circList.get(0)).getArea());
42     }
43 }
```

3. Complete the program below using ArrayList class by writing at the empty underlined space.

[Lengkapkan atur cara berikut menggunakan ArrayList dengan mengisi tempat kosong.]

```
1  import _____;
2
3  class Cuba
4  {
5
6      public static void main(String[] args) {
7
8          // declare ArrayList object named student
9          // [istiharkan objek ArrayList yang bernama student]
10         _____
11
12
13         // add two elements "Siti Rahimah " and "Robert Lau" to
14         student ArrayList
15         // [ tambah 2 elemen "Siti Rahimah " dan "Robert
16         Lau" kepada ArrayList student ]
17
18         _____
19
20
21         // display all the content of student ArrayList using
22         loop statement
23         // [pamirkan kandungan ArrayList student menggunakan
24         pernyataan gelung]
25
26         _____
27
28
29         // replace the content of the first element to "Muhammad"
30         // [gantikan kandungan elemen pertama kepada "Muhammad"]
31
32         _____
33
34     }
```