

```
1 19-may-2022          STREAM API-JAVA8
2 -----
3
4 package Java8Features;
5 import java.util.ArrayList;
6 class Product
7 {
8     int id;
9     String name;
10    double price;
11    public Product(int id, String name, double price) {
12        super();
13        this.id = id;
14        this.name = name;
15        this.price = price;
16    }
17
18 }
19 public class StreamTestProduct {
20
21     public static void main(String[] args) {
22         ArrayList<Product> al=new ArrayList<Product>();
23         al.add(new Product(1,"Dell Laptop",45000.2));
24         al.add(new Product(2,"HP Laptop",55000.2));
25         al.add(new Product(3,"LENOVA Laptop",25000.2));
26         al.add(new Product(4,"APPLE Laptop",90000.2));
27         al.stream()
28             .filter(p->p.id>=2)
29             .forEach(p->System.out.println(p.name));
30
31
32     }
33
34 }
35 OUTPUT:
36 -----
```

```
37 HP Laptop
38 LENOVA Laptop
39 APPLE Laptop
```

```
40 -----
```

```
41
42 2.THE TASK IS TO COLLECT THE NEGATIVE EVEN NUMBERS FROM THE
43 GIVEN ARRAYLIST AND STORE THE VALUES INTO NEW ARRAY;LIST
44 BY USING FILTER AND COLLECTOR METHOD.
```

```
45
46 package Java8Features;
47 import java.util.Arrays;
48 import java.util.List;
49 import java.util.stream.Collectors;
50
51 public class StreamTest1 {
52
53     public static void main(String[] args) {
54         List<Integer> al=Arrays.asList(1,-2,3,4,-6,-5,-4);
55         List<Integer>nl=al.stream()
56             .filter(p->((p<0)&&(p%2==0)))
57             .collect(Collectors.toList());
58         System.out.println(nl);
59     }
60
61 }
```

```
62 OUTPUT:
```

```
63 -----
```

```
64 [-2, -6, -4]
```

```
65 -----
```

```
66 3.GET AN EMPLOYEE DEATAILS AND SET THE LOCATION AS PUNE
67 AND PRINT THE RESPECTIVE EMPLOYEE DETAILS
```

```
68
69
70 package Java8Features;
71
72 import java.util.ArrayList;
```

```
73 import java.util.List;
74 import java.util.stream.Collectors;
75 import java.util.stream.Collectors;
76
77 class EmployeeTest
78 {
79     int empNo;
80     String name;
81     int age;
82     String location;
83     public EmployeeTest(int empNo, String name, int age, String location) {
84         super();
85         this.empNo = empNo;
86         this.name = name;
87         this.age = age;
88         this.location = location;
89     }
90     @Override
91     public String toString() {
92         return "EmployeeTest [empNo=" + empNo + ", name=" + name + ", age=" + age +
93             ", location=" + location
94             + "]";
95     }
96 }
97 public class StreamEmployeeTest {
98     public static void main(String[] args) {
99         ArrayList<EmployeeTest> al=new ArrayList<EmployeeTest>();
100         al.add(new EmployeeTest(1,"Abimanu",21,"mumbai"));
101         al.add(new EmployeeTest(2,"Beema",23,"mangalore"));
102         al.add(new EmployeeTest(3,"mukesh",22,"chennai"));
103         al.add(new EmployeeTest(4,"sakthi",24,"pune"));
104         al.add(new EmployeeTest(5,"buvi",25,"pune"));
105         ArrayList ls=(ArrayList)al.stream()
106             .filter(e->e.location=="pune")
107             .collect(Collectors.toList());
```

```
108         ls.forEach(System.out::println);
109
110     }
111
112 }
113 -----
114 OUTPUT:
115 -----
116 EmployeeTest [empNo=4, name=sakthi, age=24, location=pune]
117 EmployeeTest [empNo=5, name=buvi, age=25, location=pune]
118 -----
119
120 3.FILTER THE PASS MARK STUDENT WHOSE MARKS IS 50 AND ABOVE
121 SOLVE THIS PROBLEM BY USING COUNT AND FILTER METHOD.
122
123 package Java8Features;
124
125 import java.util.ArrayList;
126 import java.util.stream.Collectors;
127
128 class StudentTest
129 {
130     int roll;
131     String name;
132     int mark;
133     public StudentTest(int roll, String name, int mark) {
134         super();
135         this.roll = roll;
136         this.name = name;
137         this.mark = mark;
138     }
139
140 }
141 public class StreamStudentTest {
142
143     public static void main(String[] args)
```

```
144 {
145     ArrayList<StudentTest> al=new ArrayList<StudentTest>();
146     al.add(new StudentTest(1, "mukesh", 95));
147     al.add(new StudentTest(2, "logesh", 98));
148     al.add(new StudentTest(3, "lite mukesh", 100));
149     al.add(new StudentTest(4, "tej", 45));
150     al.add(new StudentTest(5, "mehck", 46));
151     Long ls= al.stream()
152         .filter(s->s.mark>50)
153         .collect(Collectors.counting());
154     System.out.println(ls);
155 }
156
157 }
```

```
158 -----
159 OUTPUT :
160 -----
161 3
162 -----
163
```