Problem 1\Main.java

```java
 1  public class Main {
 2      public static void main(String[] args) {
 3          System.out.print(puzzle(14, 10));
 4          System.out.print("\n");
 5          System.out.print(puzzle(4, 7));
 6          System.out.print("\n");
 7          System.out.print(puzzle(0, 0));
 8          System.out.print("\n");
 9      }
10
11      public static int puzzle(int base, int limit) {
12          // base and limit are nonnegative numbers
13          if (base > limit) // the base case(s) When base exceeds limit, the function returns
    -1.
14              return -1;
15          else if (base == limit) // the base case(s) When base equals limit, the function
    returns 1.
16              return 1;
17          else
18              return base * puzzle(base + 1, limit); // the recursive case(s)
19      }
20
21  }
22
```