```
1)
public class msum {
  public static int sum(int... numbers) {
    int total = 0;
    for (int num: numbers) {
      total += num;
    }
    return total;
  }
  public static void main(String[] args) {
    System.out.println(sum(10, 20, 30));
    System.out.println(sum(5, 15));
    System.out.println(sum(1, 2, 3, 4, 5));
  }
}
OUTPUT:
PS D:\java t\steam> java msum.java
60
 20
15
2)
public class name {
  // Method with varargs
  public static void printNames(String... names) {
    for (String name: names) {
      System.out.println(name);
```

```
}
  }
  public static void main(String[] args) {
    // Sample input
    printNames("Alice", "Bob", "Charlie");
  }
}
OUTPUT:
 PS D:\java t\steam> java name.java
 Alice
 Bob
 Charlie
3) public class MaxFinder {
  // Method to find maximum among double values using varargs
  public static double findMax(double... numbers) {
    if (numbers.length == 0) {
      throw new IllegalArgumentException("At least one number is required");
    }
    double max = numbers[0];
    for (double num: numbers) {
      if (num > max) {
        max = num;
      }
    }
    return max;
  }
  public static void main(String[] args) {
```

```
double result = findMax(2.3, 5.5, 1.1, 9.9);
    System.out.println(result); // Expected Output: 9.9
  }
}
OUTPUT:
 9.9
4) package JAVA;
public class MaxFinder {
  public static double COUNT(int... numbers) {
        int c=0;
    for(int i:numbers) c++;
    return c;
  }
  public static void main(String[] args) {
    double result = COUNT(2, 5, 1, 9);
    System. out. println(result);
  }
}
OUTPUT:
<terminated> MaxFinder [Java Application] C:\Users\Anish\.p2\pool\plugins\org.eclipse.justj.openjdk.ho
4.0
```

```
package JAVA;
public class MaxFinder {
  public static String COUNT(String s,String st) {
    return s.concat(st);
  }
  public static void main(String[] args) {
    String result = COUNT("hello ","world");
    System. out. println(result);
  }
}
OUTPUT:
 helloworld
6)
package JAVA;
public class MaxFinder {
  public static int mul(int... n) {
        int m=1;
        for(int i:n) {
                m*=i;
        }
    return m;
  public static void main(String[] args) {
    int result = mul(1,2,4,67,8);
    System. out. println(result);
  }
}
```

```
<terminated> MaxFinder [Java Application] C:\Users\Anish\.p2\pool\plugins\org.eclipse
7)
package JAVA;
public class MaxFinder {
  public static void mul(int... n) {
       for(int i=n.length-1;i>=0;i--) {
              System.out.print(n[i]+" ");
       }
  }
  public static void main(String[] args) {
   mul(1,2,4,67,8);
 }
}
OUTPUT:
<terminated> MaxFinder [Java Application] C:\Users\Anish\.p2\p
8 67 4 2 1
8)
package JAVA;
public class MaxFinder {
```

```
public static double mul(int... n) {
        int c=0,s=0;
        for(int i:n) {
                s+=i;
                C++;
        }
        return (double)s/c;
  }
  public static void main(String[] args) {
    double re=mul(1,2,4,67,8);
        System.out.print(re);
  }
}
OUTPUT:
 <terminated> MaxFinder [Java Application] C:\Users\Anish\.p2\pool\plugins\org.eclipse.ju
  16.4
9)
package JAVA;
public class PalindromeChecker {
  public static void checkPalindromes(String... words) {
    for (String word : words) {
      if (isPalindrome(word)) {
         System.out.println(word + ": Palindrome");
      } else {
        System.out.println(word + ": Not a Palindrome");
      }
    }
```

```
}
  private static boolean isPalindrome(String str) {
    int left = 0, right = str.length() - 1;
    while (left < right) {</pre>
      if (str.charAt(left) != str.charAt(right)) {
        return false;
      }
      left++;
      right--;
    return true;
  }
  public static void main(String[] args) {
    checkPalindromes("madam", "racecar", "java");
  }
}
OUTPUT:
zreminiareas i annaromechecker hava wh
madam: Palindrome
racecar: Palindrome
java: Not a Palindrome
10)
package JAVA;
public class WordCounter {
  // Method to count total words in all strings using varargs
  public static int countWords(String... sentences) {
    int totalWords = 0;
    for (String sentence : sentences) {
      if (sentence != null && !sentence.trim().isEmpty()) {
```

```
// Split by spaces and count words
String[] words = sentence.trim().split("\\s+");
totalWords += words.length;
}

return totalWords;
}

public static void main(String[] args) {
 int result = countWords("Hello world", "Java programming", "OpenAl");
 System.out.println(result); // Expected Output: 5
}

OUTPUT:
```

<terminated> WordCounter [Java Applicated]

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