Exp1 java if else

```
import java.util.Scanner;
public class WeirdChecker {
   public static void main(String[] args) {
      Scanner scanner = new Scanner(System.in);
      System.out.print("Enter an integer: ");
      int number = scanner.nextInt();
      if (number % 2 != 0) {
         System.out.println("Weird");
      } else if (number >= 2 && number <= 5) {
         System.out.println("Not Weird");
      } else if (number >= 6 && number <= 20) {
         System.out.println("Weird");
      } else if (number > 20) {
         System.out.println("Not Weird");
      }
      scanner.close();
   }
}
```

Exp2 stdin and stdout 2

```
import java.util.Scanner;

public class StdInStdOutII {
   public static void main(String[] args) {
      Scanner scanner = new Scanner(System.in);
      double d = scanner.nextDouble();
      int i = scanner.nextInt();
      scanner.nextLine(); // Consume the leftover newline
      String s = scanner.nextLine();
      System.out.println("String: " + s);
      System.out.println("Int: " + i);
      System.out.println("Double: " + d);
      scanner.close();
   }
}
```

Exp3 java loop

```
import java.util.Scanner;
```

```
public class MultiplicationTable {
   public static void main(String[] args) {
      Scanner scanner = new Scanner(System.in);

      // Read an integer from the user
      System.out.print("Enter a number: ");
      int n = scanner.nextInt();

      // Loop from 1 to 10 and print the multiplication table
      for (int i = 1; i <= 10; i++) {
         int result = n * i;
         System.out.println(n + " x " + i + " = " + result);
      }

      scanner.close();
   }
}
```

Exp4 java datatype

```
import java.util.Scanner;

public class DataTypesChecker {
   public static void main(String[] args) {
      Scanner scanner = new Scanner(System.in);

      int T = scanner.nextInt(); // Number of test cases

      for (int i = 0; i < T; i++) {
         try {
            long num = scanner.nextLong();
            System.out.println(num + " can be fitted in:");

            if (num >= Byte.MIN_VALUE && num <= Byte.MAX_VALUE)
               System.out.println("* byte");
            if (num >= Short.MIN_VALUE && num <= Short.MAX_VALUE)
               System.out.println("* short");
            if (num >= Integer.MIN_VALUE && num <= Integer.MAX_VALUE)
               System.out.println("* int");
            if (num >= Long.MIN_VALUE && num <= Long.MAX_VALUE)
```

```
                System.out.println("* long");

            } catch (Exception e) {
                String value = scanner.next(); // Consume the invalid input
                System.out.println(value + " can't be fitted anywhere.");
            }
        }

        scanner.close();
    }
}
```

Exp5 java end of file

```
import java.util.Scanner;

public class EndOfFile {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        int lineNumber = 1;

        // Read lines until EOF
        while (scanner.hasNextLine()) {
            String line = scanner.nextLine();
            System.out.println(lineNumber + " " + line);
            lineNumber++;
        }

        scanner.close();
    }
}
```

Exp6 java static intilaizer

```
import java.util.Scanner;

public class StaticBlockExample {
    static int B;
    static int H;
    static boolean isValid;

    // Static initializer block
```

```
  static {
    Scanner scanner = new Scanner(System.in);
    B = scanner.nextInt();
    H = scanner.nextInt();
    if (B > 0 && H > 0) {
      isValid = true;
    } else {
      isValid = false;
      System.out.println("java.lang.Exception: Breadth and height must be positive");
    }
    scanner.close();
  }

  public static void main(String[] args) {
    if (isValid) {
      int area = B * H;
      System.out.println(area);
    }
  }
}
```

7. Java Int to String

```
import java.util.Scanner;

public class IntToString {
  public static void main(String[] args) {
    Scanner scanner = new Scanner(System.in);

    try {
      int n = scanner.nextInt();

      // Convert int to String
      String s = Integer.toString(n);

      // Check if conversion was correct
      if (n == Integer.parseInt(s)) {
        System.out.println("Good job");
      } else {
        System.out.println("Wrong answer");
```

```
        }

      } catch (Exception e) {
        System.out.println("Wrong answer");
      }

      scanner.close();
    }
}
```

8. Java Date and Time

```
import java.util.Scanner;
import java.time.LocalDate;
import java.time.format.TextStyle;
import java.util.Locale;

public class FindDayOfWeek {
    public static void main(String[] args) {
      Scanner scanner = new Scanner(System.in);

      // Read input: month, day, year
      int month = scanner.nextInt();
      int day = scanner.nextInt();
      int year = scanner.nextInt();

      // Create LocalDate and get day of week
      LocalDate date = LocalDate.of(year, month, day);
      String dayOfWeek = date.getDayOfWeek().toString(); // Already in uppercase

      System.out.println(dayOfWeek);

      scanner.close();
    }
}
```

9. Java Currency Formatter

```
import java.util.*;
import java.text.*;

public class CurrencyFormatter {
```

```
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        double payment = scanner.nextDouble();
        scanner.close();

        // Create formatters for each locale
        Locale us = Locale.US;
        Locale india = new Locale("en", "IN"); // India is not built-in, so create custom
        Locale china = Locale.CHINA;
        Locale france = Locale.FRANCE;

        // Format currency
        NumberFormat usFormat = NumberFormat.getCurrencyInstance(us);
        NumberFormat indiaFormat = NumberFormat.getCurrencyInstance(india);
        NumberFormat chinaFormat = NumberFormat.getCurrencyInstance(china);
        NumberFormat franceFormat = NumberFormat.getCurrencyInstance(france);

        // Print results
        System.out.println("US: " + usFormat.format(payment));
        System.out.println("India: " + indiaFormat.format(payment));
        System.out.println("China: " + chinaFormat.format(payment));
        System.out.println("France: " + franceFormat.format(payment));
    }
}
```

10. Java Strings Introduction

```
import java.util.Scanner;

public class StringIntro {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        // Read input strings
        String A = scanner.next();
        String B = scanner.next();

        // 1. Sum of lengths
        int totalLength = A.length() + B.length();
        System.out.println(totalLength);
```

```
        // 2. Lexicographical comparison
        if (A.compareTo(B) > 0) {
            System.out.println("Yes");
        } else {
            System.out.println("No");
        }

        // 3. Capitalize first letters
        String capitalizedA = A.substring(0, 1).toUpperCase() + A.substring(1);
        String capitalizedB = B.substring(0, 1).toUpperCase() + B.substring(1);
        System.out.println(capitalizedA + " " + capitalizedB);

        scanner.close();
    }
}
```

11. Java String Reverse

```
import java.util.Scanner;

public class StringReverse {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        String input = scanner.next();
        scanner.close();

        String reversed = new StringBuilder(input).reverse().toString();

        if (input.equals(reversed)) {
            System.out.println("Yes");
        } else {
            System.out.println("No");
        }
    }
}
```

12. Java String Tokens

```
import java.util.Scanner;

public class StringTokens {
```

```
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        String input = scanner.nextLine();
        scanner.close();

        // Remove leading/trailing spaces and check for empty input
        input = input.trim();
        if (input.isEmpty()) {
            System.out.println(0);
            return;
        }

        // Split using non-letter characters as delimiters
        String[] tokens = input.split("[^A-Za-z]+");

        // Print the number of tokens and each token
        System.out.println(tokens.length);
        for (String token : tokens) {
            System.out.println(token);
        }
    }
}
```

13. Java Regex

```
import java.util.Scanner;

class IPAddressValidator {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        String ip = scanner.nextLine();
        scanner.close();

        if (ip.matches(new MyRegex().pattern)) {
            System.out.println("Valid");
        } else {
            System.out.println("Invalid");
        }
    }
}
```

```
class MyRegex {
   // Regex to match 0–255 (single octet)
   String num = "([0-9]{1,2}|(0|1)[0-9]{2}|2[0-4][0-9]|25[0-5])";

   // Full pattern: 4 octets separated by dots
   public String pattern = "^" + num + "\\." + num + "\\." + num + "\\." + num + "$";
}
```

14. Java Primality Test

```
import java.util.Scanner;

public class PrimalityTest {
   public static void main(String[] args) {
      Scanner scanner = new Scanner(System.in);
      int n = scanner.nextInt();
      scanner.close();

      if (isPrime(n)) {
         System.out.println("Prime");
      } else {
         System.out.println("Not prime");
      }
   }

   // Method to check if a number is prime
   public static boolean isPrime(int n) {
      if (n <= 1)
         return false;
      if (n == 2)
         return true;
      if (n % 2 == 0)
         return false;

      for (int i = 3; i <= Math.sqrt(n); i += 2) {
         if (n % i == 0)
            return false;
      }
```

15. Java 1D Array

```
import java.util.Scanner;


public class OneDArray {
   public static void main(String[] args) {
      Scanner scanner = new Scanner(System.in);


      // Read size of array
      int n = scanner.nextInt();
      int[] arr = new int[n];


      // Read n integers
      for (int i = 0; i < n; i++) {
         arr[i] = scanner.nextInt();
      }


      // Print array elements separated by spaces
      for (int i = 0; i < n; i++) {
         System.out.print(arr[i]);
         if (i != n - 1) {
            System.out.print(" ");
         }
      }


      scanner.close();
   }
}


      return true;
   }
}
```