1. Apply an Object-oriented paradigm using java to develop a standalone application for Number conversion in java. (may be for this we would introduce the basic data types) Level: Intermediate

```
import java.util.Scanner;

public class NumberConverter {
  private int number;
  private String result;

  public NumberConverter(int number) {
    this.number = number;
  }

  public void toBinary() {
    result = Integer.toBinaryString(number);
  }

  public void toHex() {
    result = Integer.toHexString(number);
  }

  public void toOctal() {
    result = Integer.toOctalString(number);
  }

  public static void main(String[] args) {
    Scanner scanner = new Scanner(System.in);
    System.out.print("Enter a number: ");
    int number = scanner.nextInt();
    NumberConverter converter = new NumberConverter(number);
```

```
    System.out.print("Enter the conversion type (binary, hex, octal): ");
    String conversionType = scanner.next();
    if (conversionType.equals("binary")) {
      converter.toBinary();
    } else if (conversionType.equals("hex")) {
      converter.toHex();
    } else if (conversionType.equals("octal")) {
      converter.toOctal();
    } else {
      System.out.println("Invalid conversion type");
      return;
    }

    System.out.println("Result: " + converter.result);
  }
}
```