1.

```
public class Exercise36 {
  public static void main(String[]args) {
    System.out.println(isEven(2));
    System.out.println(isEven(3));
  }

  public static boolean isEven(int number) {
    if(number%2 == 0) {
      return true;
    } else {
      return false;
    }
  }
}
```

2.

```
import java.util.Scanner;

public class Exercise36 {
  public static void main(String[]args) {
    Scanner input = new Scanner(System.in);
    boolean loop = true;
    while(loop) {
      System.out.println("Ange ett tal från 0 till 9.");
      int number = input.nextInt();
      if(number >= 0 && number < 10) {
        System.out.println("Bra jobbat, du kan följa simpla instruktioner.");
        loop = false;
```

```
    }
   }
  }
}
```

3.

```
import java.util.Scanner;

public class Exercise36 {
  public static void main(String[]args) {
    Scanner input = new Scanner(System.in);
    boolean loop = true;
    String oldText = "";
    while(loop) {
      System.out.println("Skriv nåt då...");

      String newText = input.nextLine();
      if(newText.equals(oldText)) {
        loop = false;
      } else {
        oldText = newText;
      }
    }
  }
}
```

4.

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

```
public class Exercise36 {
  public static void main(String[]args) {
    System.out.println("Ange två tal så beräknas medelvärdet av dem:");

    /double firstNum = getIntFromUser();
    double secondNum = getIntFromUser();
    double mean = calcMean(firstNum, secondNum);
    System.out.println(mean);

  }

  public static double getIntFromUser() {
    Scanner input = new Scanner(System.in);
    return input.nextDouble();

  }

  public static double calcMean(double num1, double num2) {
    return (num1+num2)/2;
  }

}
```

5.

```
import java.util.Scanner;

public class Exercise36 {
  public static void main(String[]args) {
    for(int i = 0; i < 5; i++) {
      boolean result = isAuthorised();
      if(result && i == 4) {
```

```
      System.out.println("Ouff, close one, but you got it on the last try!");
    } else if(result) {
      System.out.println("Congratulations, correct password sequence!");
      break;
    } else {
      System.out.println("Incorrect password sequence! Try again!");
    }
  }
}

public static boolean isAuthorised() {
  System.out.println("Write the three passwords:");
  System.out.print("Password 1:");
  String pass1 = getPassword();
  System.out.print("Password 2:");
  String pass2 = getPassword();
  System.out.print("Password 3:");
  String pass3 = getPassword();
  if(pass1.equals(pass2) || pass1.equals(pass3) || pass2.equals(pass3)) {
    return false;
  } else if(checkCorrect(pass1) && checkCorrect(pass2) && checkCorrect(pass3)) {
    return true;
  } else {
    return false;
  }
}

public static boolean checkCorrect(String pass) {
  String correctPass1 = "piggy";
  String correctPass2 = "snuff";
  String correctPass3 = "bark";
```

```
   if(pass.equals(correctPass1) || pass.equals(correctPass2) || pass.equals(correctPass3)) {
     return true;
   } else {
     return false;
   }
  }

  public static String getPassword(){
   Scanner input = new Scanner(System.in);
   return input.nextLine();
  }
}
```

6.

```
import java.util.Scanner;

public class Exercise36 {
  public static void main(String[]args) {
   System.out.println(anyIsTrue(false, false, false, false));
   System.out.println(anyIsTrue(true, false, false, false));
   System.out.println(anyIsTrue(false, true, false, false));
   System.out.println(anyIsTrue(false, false, true, false));
   System.out.println(anyIsTrue(false, false, false, true));
   System.out.println(anyIsTrue(true, true, true, true));
  }

  public static boolean anyIsTrue(boolean bool1, boolean bool2, boolean bool3, boolean bool4) {
   if(bool1 || bool2 || bool3 || bool4) {
     return true;
   } else {
     return false;
```

```
    }
  }
}
```

7.

```
import java.util.Scanner;

public class Exercise36 {
  public static void main(String[]args) {
    System.out.println(anyIsTrue(false, false, false, false));
    System.out.println(anyIsTrue(true, false, false, false));
    System.out.println(anyIsTrue(false, true, false, false));
    System.out.println(anyIsTrue(false, false, true, false));
    System.out.println(anyIsTrue(false, false, false, true));
    System.out.println(anyIsTrue(true, true, true, true));

    System.out.println(anyIsFalse(false, false, false, false));
    System.out.println(anyIsFalse(true, false, false, false));
    System.out.println(anyIsFalse(false, true, false, false));
    System.out.println(anyIsFalse(false, false, true, false));
    System.out.println(anyIsFalse(false, false, false, true));
    System.out.println(anyIsFalse(true, true, true, true));
  }

  public static boolean anyIsTrue(boolean bool1, boolean bool2, boolean bool3, boolean bool4) {
    if(bool1 || bool2 || bool3 || bool4) {
      return true;
    } else {
      return false;
    }
  }
```

```
  public static boolean anyIsFalse(boolean bool1, boolean bool2, boolean bool3, boolean bool4) {
    if(!bool1 || !bool2 || !bool3 || !bool4) {
      return true;
    } else {
      return false;
    }
  }
}
```