1. Laden Sie das Archiv „J_200_Aufgabe1.zip" herunter und entpacken Sie es.
   - Compilieren Sie den darin enthaltenen Java-Quellcode.
   - Führen Sie die Klasse Steuerung aus.
   - Bei negativen Positionswerten wird beim Fräsen die Maschine zerstört.
   - Denken Sie sich daher eine Möglichkeit aus um die Maschine vor Zerstörung zu schützen. (WICHTIG: Die Methode fraese() darf nicht modifiziert werden)

```
public class Fraesmaschine {

    private int xPos, yPos;

    public int getXPos() {
        return xPos;
    }

    public int getYPos() {
        return yPos;
    }

    public void setXPos(int xPos) {
        this.xPos=xPos;
    }

    public void setYPos(int yPos) {
        this.yPos=yPos;
    }

    public void fraese() {
        if(xPos>=0 && xPos <100 && yPos>=0 && yPos<100)
            System.out.println("Zur Position "+xPos+"/"+yPos+" gefraest.");
        else
            System.out.println("Maschine kaputt gefraest");
    }
}
```

```
public class Steuerung {

    public static void main(String[] args) {
        Fraesmaschine f=new Fraesmaschine();
        f.setXPos(10);
        f.setYPos(-10);
        f.fraese();


    }
}
```

2. Bearbeiten sie die Aufgaben 11. – 15. aus einem SCJP-Fragenkatalog:

11. Given the following,

```
1. System.out.print("Start ");
2.     try {
3.           System.out.print("Hello world");
4.           throw new FileNotFoundException();
5.     }
6.     System.out.print(" Catch Here ");
7.     catch(EOFException e) {
8.           System.out.print("End of file exception");
9.     }
10.    catch(FileNotFoundException e) {
11.          System.out.print("File not found");
12.    }
```

and given that EOFException and FileNotFoundException are both subclasses of IOException, and further assuming this block of code is placed into a class, which statement is most true concerning this code?

A. The code will not compile.
B. Code output: Start Hello world File Not Found.
C. Code output: Start Hello world End of file exception.
D. Code output: Start Hello world Catch Here File not found.

12. Given the following,

```
1. public class MyProgram {
2.   public static void main(String args[]){
3.         try {
4.               System.out.print("Hello world ");
5.         }
6.         finally {
7.               System.out.println("Finally executing ");
8.         }
9.    }
10. }
```

what is the result?

A. Nothing. The program will not compile because no exceptions are specified.
B. Nothing. The program will not compile because no catch clauses are specified.
C. Hello world.
D. Hello world Finally executing

13. Given the following,

```
1. import java.io.*;
2. public class MyProgram {
3.    public static void main(String args[]){
4.         FileOutputStream out = null;
5.         try {
6.              out = new FileOutputStream("test.txt");
7.              out.write(122);
8.         }
9.         catch(IOException io) {
10.             System.out.println("IO Error.");
11.        }
12.        finally {
13.             out.close();
14.        }
15.   }
16. }
```

and given that all methods of class FileOutputStream, including close(), throw an IOException, which of these is true? (Choose one.)

A. This program will compile successfully.
B. This program fails to compile due to an error at line 4.
C. This program fails to compile due to an error at line 6.
D. This program fails to compile due to an error at line 9.
E. This program fails to compile due to an error at line 13.

14. Given the following,

```
1. public class MyProgram {
2.    public static void throwit() {
3.         throw new RuntimeException();
4.    }
5.    public static void main(String args[]){
6.         try {
7.              System.out.println("Hello world ");
8.              throwit();
9.              System.out.println("Done with try block ");
10.        }
11.        finally {
12.             System.out.println("Finally executing ");
13.        }
14.   }
15. }
```

which answer most closely indicates the behavior of the program?

A. The program will not compile.
B. The program will print Hello world, then will print that a RuntimeException has occurred, then will print Done with try block, and then will print Finally executing.
C. The program will print Hello world, then will print that a RuntimeException has occurred, and then will print Finally executing.
D. The program will print Hello world, then will print Finally executing, thenwill print that a RuntimeException has occurred.

15. Given the following,

```
1. public class RTExcept {
2.    public static void throwit () {
3.         System.out.print("throwit ");
4.         throw new RuntimeException();
5.    }
6.    public static void main(String [] args) {
7.         try {
8.              System.out.print("hello ");
9.              throwit();
10.        }
11.        catch (Exception re ) {
12.             System.out.print("caught ");
13.        }
14.        finally {
15.             System.out.print("finally ");
16.        }
17.        System.out.println("after ");
18.   }
19. }
```

what is the result?

A. hello throwit caught
B. Compilation fails
C. hello throwit RuntimeException caught after
D. hello throwit RuntimeException
E. hello throwit caught finally after
F. hello throwit caught finally after RuntimeException