

Code & Sample I/O

```
class InvalidVaccineException extends Exception {
    private int dose;
    private String company;

    InvalidVaccineException(int dose) {
        this.dose = dose;
    }

    InvalidVaccineException(String company) {
        this.company = company;
    }

    public String toString() {
        if(company==null)
            return "InvalidVaccineException[Dose=" + dose + "]";
        else
            return "InvalidVaccineException[Company="+ company + "]";
    }
}
```

```
import java.io.*;
import java.util.*;
class Vaccine implements Serializable{
    int dose;
    String company;

    Vaccine(int newDose, String newCompany){
        dose = newDose;
        company = newCompany;
    }

    Vaccine(String newCompany){
        dose = 1;
        company = newCompany;
    }

    int getDose(){
        return dose;
    }
    void setDose(int doseNumber) throws InvalidVaccineException{
        if(doseNumber!=1 && doseNumber!=2)
            throw new InvalidVaccineException(doseNumber);
        else
            dose = doseNumber;
    }
    String getCompany(){
        return company;
    }
    void setCompany(String newCompany) throws InvalidVaccineException{
        if(newCompany.equalsIgnoreCase("Covaxin")==false && newCompany.equalsIgnoreCase("Covishield")==false)
            throw new InvalidVaccineException(newCompany);
        else
            company = newCompany;
    }
}

public static void main(String args[]){
    Scanner in = new Scanner(System.in);
    System.out.println("Adding new vaccine to Resources");
    System.out.println("Enter name of Manufacturing Company");
    String company = in.next();
}
```

```

System.out.println("Enter 1 for first dose, 2 for second dose");
int dose = in.nextInt();

Vaccine vaccine1 = new Vaccine(1, "Covaxin");
try{
    vaccine1.setCompany(company);
    vaccine1.setDose(dose);
}
catch(InvalidVaccineException e){
    System.out.println("Exception Encountered");
    System.out.println(e);
}
if(vaccine1!=null){
    try{
        FileOutputStream fout = new FileOutputStream("vaccines.txt");
        ObjectOutputStream out = new ObjectOutputStream(fout);
        out.writeObject(vaccine1);
        out.flush();
        out.close();
        System.out.println("Success");
    }catch(Exception e){System.out.println(e);}
}
}
}

```

Sample I/O

```

PS C:\Users\with\OneDrive\Desktop\College\COVID-Resource-Management-System> java Vaccine
Adding new vaccine to Resources
Enter name of Manufacturing Company
Covax
Enter 1 for first dose, 2 for second dose
2
Exception Encountered
InvalidVaccineException[Company=Covax]
Success
PS C:\Users\with\OneDrive\Desktop\College\COVID-Resource-Management-System> java Vaccine
Adding new vaccine to Resources
Enter name of Manufacturing Company
Covaxin
Enter 1 for first dose, 2 for second dose
3
Exception Encountered
InvalidVaccineException[Dose=3]

```