

CS180: HW4 Solutions

Anmer Daskin

3.20 (10pnts=5+5)

a) (5pnts=1+2+2) Write a Java program that prompts user to enter the number of rooms in her room. Save the value entered in a String, convert it to byte and print it...

```
(1pnts) Scanner sc= new Scanner(System.in);
System.out.println("Enter the input");
(2pnts) String response=sc.nextLine();
(2pnts) byte a=Byte.parseByte(response);
System.out.println(a);
```

b) (5pnts) It gives number format exception. The string has the type double which is not parsable as byte.

3.21 (20 pnts=5 pnts for getting inputs + 15 pnts for evaluating the expressions(5 pnts for each expression) . TA can decide the amount of points for different things.) Write a java program to evaluate each expression in Exercise 3.17.

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

```
public class HW4321{

    public double f(double x){
        //a function
        return x;
    }
    public double g(double x){
        //a function
        return x;
    }
    public double expr_i(double a,double b,double c){

        return f(a)+f(b)+f(c);

    }
    public double expr_ii(double a,double b){
        return f(a*f(b));
    }

    public double expr_iii(double a, double b, double c){
        return f(g(a))+g(b)+f(c);
    }

    public static void main(String[] args){
        double a,b,c;
```

```
String response;
HW4321 hw4321=new HW4321();
Scanner sc=new Scanner(System.in);
System.out.println("Enter a");
response=sc.nextLine();
a=Double.parseDouble(response);
System.out.println("Enter b");
response=sc.nextLine();
b=Double.parseDouble(response);
System.out.println("Enter c");
response=sc.nextLine();
c=Double.parseDouble(response);
System.out.println("Expression i:"+hw4321.expr_i(a, b, c));
System.out.println("Expression ii:"+hw4321.expr_ii(a, b));
System.out.println("Expression iii:"+hw4321.expr_iii(a, b, c));
}
}
```