

CS 1713 Exam 1 Solutions — Spring 2010

- 1) (3 points each)
- a) `int numberOfStudents;`
 - a) `double pricePerPoundOfCoffee;`
 - b) `double averageNumberOfCellPhones;`
 - c) `String homeAddress;`
 - d) `double fractionOfCarsWithBadBrakes;`
- 2) (5 points)
- ```
Random rand = new Random();
int count = 0;
int value;
for (int i=0;i<1000;i++) {
 value = rand.nextInt(6) + 1;
 if (value == 2)
 count++;
}
System.out.println("The number of 2's is "+count);
```
- 3) (3 points each)   a) 4   b) 4.67   c) 10.67   d) 10.00   e) 2   f) 5.60
- 4) (5 points)
- ```
if (!(name1.equals(name2)))
    System.out.println("The names are not the same");
```
- 5) (10 points)
- ```
totalCost = 5.0*pounds;
if (pounds > 7)
 totalCost = 0.9*totalCost;
```
- 6) (5 points)
- ```
a) if (x >= 20)
    price = 15.7;
b) if ( (x >= 50) && (x <= 150) )
    price = 18.49;
```
- 7) (5 points)
- ```
if (count == 0)
 System.out.println("Warning, count is 0");
else
 System.out.println("The average is "+(double)sum/count);
```
- 8) (5 points)
- ```
Scanner scan = new Scanner(System.in);
System.out.println("Enter an integer:");
int val = scan.nextInt();
System.out.println("The number entered was "+val);
```
- 9) (10 points)
- ```
Scanner scan = new Scanner(System.in);
int val;
int sum = 0;
do {
 System.out.println("Enter an integer:");
 val = scan.nextInt();
 sum = sum + val;
} while (val > 0);
```
- 10) (10 points)
- ```
double sum = 0;
int i = 1;
while (i*i < 100000) {
    sum = sum + i;
    i++;
}
```
- 11) (10 points)
- ```
for (int i=1;i<=100;i++)
 if (((i%3) == 0) && ((i %5) == 0))
 System.out.println("FixxBuzz");
 else if (i%3 == 0)
 System.out.println("Fizz");
 else if (i%5 == 0)
 System.out.println("Buzz");
 else
 System.out.println(i);
```