

Pre Lab #4: Exercise Sheet

Print out this exercise sheet, complete it and turn it in to your lab instructor before your lab session on Wednesday/Thursday ends.

1) Given the following variables:

```
int a = 2, b = 3, c = 5;
double x = 3.5 ;
```

Trace the evaluation of the following expressions and give their result:

- $a + b - c$ _____
- $a + c/b + 2 - 8*b$ _____
- $a + c/(b+2) - 8*b$ _____
- `(int) x;` _____
- `(int) x*c` _____
- `(int) (x*c)` _____
- `(int) (x*c/a)` _____
- $3*c/10$ _____
- $x + (\text{double}) 3*c/10$ _____
- $(\text{double}) 3*c/10 - c/a$ _____

2) What are the values of a, b, c and d after the following statements are executed?

```
int a=1;
int b= 10;
int c= b + 3;
int d=24;
a++;
c--;
b += c/a - b;
d = b * 2 - a + c
```

The value of a is _____

The value of b is _____

The value of c is _____

The value of d is _____

3) Explain what the problem(s) (if any) is in the following java code:

```
int a=2;
int b= 10;
double x=10.0;
a = 5*x + b;
x += a * b - 3;
```