

Please read all the questions carefully and raise your hand for assistance if you have any questions. Keep your answers brief (but you can use the back side of the page if needed).

1. In Wednesday's lecture, we discussed the three possible storage classes for a variable: static, automatic, and dynamic. What's the difference between automatic and dynamic? (Be brief)
2. Draw a boxes-and-arrows diagram showing the situation and values of variables after the following code fragment has been executed.

```
int j=1, k=3;
int *p; int *q;
p = &j;
q = &k;
p = q;
*p = 10;
```

3. Write down the output produced when the following program is executed. For brevity, the implementation code of member functions is given in the class declaration.

```
class A {
public:
    A (int i)      { cout << "INT"; }
    A (double d)  { cout << "DOUBLE"; }
    A (char c)    { cout << "CHAR"; }
};

int main() {
    double x = 1.0;
    char c = 'A';
    A a(c);
    A *b;
    b = new A(x);
    delete b;
}
```