Assignment #4

```
@Test
public void PCTest1() {
    thermo.setCurrentTemp(63);
    thermo.setThresholdDiff(5);
    thermo.setOverride(false);
    thermo.setOverTemp(63);
    thermo.setMinLag(10);
    thermo.setTimeSinceLastRun(12);
    assertTrue(thermo.turnHeaterOn(ps));
@Test
public void PCTest2(){
   thermo.setCurrentTemp(63);
   thermo.setThresholdDiff(5);
   thermo.setOverride(true);
    thermo.setOverTemp(75);
   thermo.setMinLag(12);
   thermo.setTimeSinceLastRun(10);
    assertFalse(thermo.turnHeaterOn(ps));
```

```
@Test
public void PCTest3() {
   thermo.setCurrentTemp(65);
    thermo.setThresholdDiff(3);
   //clause b: Override
    thermo.setOverride(true);
    thermo.setOverTemp(60);
    thermo.setMinLag(10);
   thermo.setTimeSinceLastRun(12);
   assertTrue(thermo.turnHeaterOn(ps));
@Test
public void PCTest4(){
    thermo.setCurrentTemp(65);
    thermo.setThresholdDiff(3);
    thermo.setOverride(false);
    thermo.setOverTemp(60);
   //clause d: timeSinceLastRun > minLag
    thermo.setMinLag(10);
    thermo.setTimeSinceLastRun(12);
    assertTrue(thermo.turnHeaterOn(ps));
```

```
@Test
public void CCTest1() {
    thermo.setCurrentTemp(63);
    thermo.setThresholdDiff(5);
    thermo.setOverride(true);
    thermo.setOverTemp(75);
    thermo.setMinLag(10);
    thermo.setTimeSinceLastRun(12);
    assertTrue(thermo.turnHeaterOn(ps));
@Test
public void CCTest2() {
   thermo.setCurrentTemp(65);
   thermo.setThresholdDiff(9);
   thermo.setOverride(false);
   thermo.setOverTemp(63);
   thermo.setMinLag(12);
   thermo.setTimeSinceLastRun(10);
   assertFalse(thermo.turnHeaterOn(ps));
```

```
@Test
public void CACCTest1() {
   thermo.setCurrentTemp(63);
   thermo.setThresholdDiff(5);
   thermo.setOverride(true);
   thermo.setOverTemp(75);
   thermo.setMinLag(10);
   thermo.setTimeSinceLastRun(12);
   assertTrue(thermo.turnHeaterOn(ps));
@Test
public void CACCTest2() {
    thermo.setCurrentTemp(66);
    thermo.setThresholdDiff(9);
    thermo.setOverride(true);
    thermo.setOverTemp(75);
    thermo.setMinLag(10);
    thermo.setTimeSinceLastRun(12);
    assertFalse(thermo.turnHeaterOn(ps));
```

```
@Test
public void CACCTest3() {
    thermo.setCurrentTemp(65);
    thermo.setThresholdDiff(5);
    thermo.setOverride(true);
    thermo.setOverTemp(75);
    //clause d: timeSinceLastRun > minLag
    thermo.setMinLag(10);
    thermo.setTimeSinceLastRun(12);
    assertTrue(thermo.turnHeaterOn(ps));
@Test
public void CACCTest4() {
    //clause a: curTemp < dTemp - thresholdDiff
    thermo.setCurrentTemp(65);
    thermo.setThresholdDiff(5);
    thermo.setOverride(false);
    thermo.setOverTemp(75);
    thermo.setMinLag(10);
    thermo.setTimeSinceLastRun(12);
    assertFalse(thermo.turnHeaterOn(ps));
```

```
@Test
public void CACCTest5() {
    //clause a: curTemp < dTemp - thresholdDiff
    thermo.setCurrentTemp(63);
    thermo.setThresholdDiff(5);

    //clause b: Override
    thermo.setOverride(true);

    //clause c: curTemp < overTemp - thresholdDiff
    thermo.setOverTemp(70);

    //clause d: timeSinceLastRun > minLag
    thermo.setMinLag(12);
    thermo.setTimeSinceLastRun(10);

    assertFalse(thermo.turnHeaterOn(ps));
}
```