

pencil6

Solutions To Pencil 6 Exercises:

1 A.

They are not declared as static nested classes because static classes don't have access to instance variables of the enclosing class.

In this code snippet, the member nested classes SubmitListener and ClearListene are accessing the enclosing class instance variable upperText and lowerText respectively.

If the nested classes were static we wouldn't have access to those variables and the classes would be of no importance.

1.B.

```
JButton submitButn = new JButton(SUBMIT);
getActionListener(submitButn);
public void getActionListener(final JButton button){
    class SubmitListener implements ActionListener {
        public void actionPerformed(ActionEvent evt) {
            inputString = upperText.getText();
            System.out.println("Got input: "+inputString);
        }
    }
    button.addActionListener(new SubmitListener());
}
```

```
JButton clearButn = new JButton(CLEAR);
clearButn.addActionListener(new ClearListener(){
    @Override
    public void actionPerformed(ActionEvent ae){
        lowerText.setText("");
        System.out.println("Clearing output text area.");
    }
});
```

2.A. In this situation, I would select (ii) Make it a local inner class, defined within myMethod(); because a local inner class should be defined in the location where it is needed. In this case the inner class is needed for the method only; hence we should make the inner class local.

B. In this situation, I would select (iii) Make it an anonymous inner class, defined within myMethod(); because Anonymous classes are mostly called once because they don't have names. the method is calling it once hence, it should be an anonymous nested class.

C. In this situation I would select (i) Make it a member inner class; the method is

pencil6

accessed

repetitively, if I select option ii, so many instance will be created which is bad for memory.

If I select option iii the method is called repeatedly hence so many anonymous classes will

be created which is again not good for memory. By making the method a member, all this

disadvantages will be eliminated.