## A4 MiniTest Answers

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## 1. (Sensor Framework)

## A) Code Snippets

a) List available sensors of a device

```
//edit list_view
ListView list_view = (ListView) findViewById(R.id.sensor_list);
list_view.setOnItemClickListener(this);

//get all sensors
SensorManager mgr = (SensorManager) getSystemService(SENSOR_SERVICE);
List<Sensor> sensors = mgr.getSensorList(Sensor.TYPE_ALL);

SensorArrayAdapter<Sensor> array_adapter = new SensorArrayAdapter<Sensor>(this, android.R.layout.simple_list_item_1, sensors);
list_view.setAdapter(array_adapter);
```

b) Retrieve the value range of a specific Sensor

```
Sensor item;
item.getMaximumRange();
```

c) Register for monitoring Accelerometer sensor changes at the maximum available rate

```
//initialize a SensorManager
SensorManager sm = (SensorManager)getSystemService(SENSOR_SERVICE);
Sensor sensor;

//from AntiTheftService
movementDetector = new SpikeMovementDetector(this, sensitivity);

//get ACCELERATION sensor
sensor = sm.getDefaultSensor(Sensor.TYPE_ACCELERATION);

//register Listener with fastest available delay
sm.registerListener(movementDetector, sensor, SensorManager.SENSOR_DELAY_FASTEST);
```

- B) Search the Mistake
- 2. (Activity Lifecycle)
- 3. (Resources)
- 4.
- 5. (Service Lifecycle)
- **a**)
- b)
- **c**)
- d)
- 6. (Android Manifest)