Exercise 1

Applet Development with JCOP Tools

In this exercise, you will develop a simple applet using the JCOP Tools plug-in for Eclipse. The goal is to become familiar with the development environment and debugging tools.

The applet is a simple calculator and shall satisfy the following requirements:

1. The applet shall accept any CLA byte value.
2. If the INS byte is 0x00, the applet shall return the ASCII string “calculator” as DATA in the RAPDU.
3. If the INS byte is 0x02, the applet shall return the sum of P1 and P2 as one byte DATA in the RAPDU.
4. If the INS byte is 0x04, the applet shall return the value of P1 minus P2 as one byte DATA in the RAPDU.
5. If the INS byte is 0x06, the applet shall return the product of P1 and P2 as one byte DATA in the RAPDU.
6. If the INS byte is 0x08, the applet shall return the value of P1 divided by P2 as one byte DATA in the RAPDU.
7. If the INS byte is 0x0a, the applet shall ignore P1 and P2, and return the sum of all bytes in CDATA as one byte DATA in the RAPDU.
8. The applet shall reject all other INS values by returning SW_INS_NOT_SUPPORTED.

Sample Input/Output

```
=> 00 00                                                  ..
<= 63 61 6C 63 75 6C 61 74 6F 72 90 00                    calculator..

=> 00 02 05 03                                            ....
<= 08 90 00                                               ...

=> 00 04 05 03                                            ....
<= 02 90 00                                               ...

=> 00 06 05 03                                            ....
<= 0F 90 00                                               ...

=> 00 08 05 03                                            ....
<= 01 90 00                                               ...

=> 00 0A 00 00 04 01 02 03 04                             .........
<= 0A 90 00                                               ...

=> 00 0C                                                  ..
<= 6D 00
```