Exercício 6

Observe as saídas B para cada tipo de variável que ela assume – valores circulados em vermelho.

Código

```
#include "rims.h"


/* This is a sample program.  You can save/compile/run it,

   modify it first, or just load a different program.     */


/* Sets B0 to 1 as quickly as possible when A0==1 and A1==0*/


/* Note that A0 - A7 can be set by clicking the switches to

   the left, and B0 - B7 can be viewed as LEDs to the right

   (green corresponds to '1', red to '0').              */


void main()
{
   unsigned char ucI1 = 14;

   unsigned short usI2 = 3;

   signed long slI3 = 35;

   unsigned char bMyBitVar = 1;


   while (1) {

     B = ucI1;

     B = usI2;

     B = slI3;

     B = bMyBitVar;

   }
```

}


```
7
8    /* Note that A0 - A7 can be set by clicking the switches to
9       the left, and B0 - B7 can be viewed as LEDs to the right
10      (green corresponds to '1', red to '0').                    */
11
12   void main()
13   {
14       unsigned char ucI1 = 14;
15       unsigned short usI2 = 3;
16       signed long slI3 = 35;
17       unsigned char bMyBitVar = 1;
18
19       while (1) {
20           B = ucI1;
21           B = usI2;
22           B = slI3;
23           B = bMyBitVar;
24       }
25   }
```

B = 14 = x0E


```
7
8    /* Note that A0 - A7 can be set by clicking the switches to
9       the left, and B0 - B7 can be viewed as LEDs to the right
10      (green corresponds to '1', red to '0').                    */
11
12   void main()
13   {
14       unsigned char ucI1 = 14;
15       unsigned short usI2 = 3;
16       signed long slI3 = 35;
17       unsigned char bMyBitVar = 1;
18
19       while (1) {
20           B = ucI1;
21           B = usI2;
22           B = slI3;
23           B = bMyBitVar;
24       }
25   }
```

B = 3 = x03

Screenshot 1 — Riverside-Irvine Microcontroller Simulator (RIMS)

```
 7
 8      /* Note that A0 - A7 can be set by clicking the switches to
 9         the left, and B0 - B7 can be viewed as LEDs to the right
10         (green corresponds to '1', red to '0').              */
11
12      void main()
13    ┌ {
14          unsigned char ucI1 = 14;
15          unsigned short usI2 ...;
16          signed long slI3    35;
17          unsigned char bMyBitVar = 1;
18
19    ┌      while (1) {
20              B = ucI1;
21              B = usI2;
22              B = slI3;
23 ▶            B = bMyBitVar;
24          }
25      }
```

A0
A7
A = 0
= x00

B0
B = 35
= x23

Screenshot 2 — Riverside-Irvine Microcontroller Simulator (RIMS)

```
 7
 8      /* Note that A0 - A7 can be set by clicking the switches to
 9         the left, and B0 - B7 can be viewed as LEDs to the right
10         (green corresponds to '1', red to '0').              */
11
12      void main()
13    ┌ {
14          unsigned char ucI1 = 14;
15          unsigned short usI2 = 3;
16          signed long slI3 = 35;
17          unsigned char bMyBitVar = 1;
18
19 ▶ ┌      while (1) {
20              B = ucI1;
21              B = usI2;
22              B = slI3;
23              B = bMyBitVar;
24          }
25      }
```

A0
A7
A = 0
= x00

B0
B = 1
= x01