

```
#define MODE_USR      0x10    /* Never use this one, as there is no way back! */
#define MODE_FIQ      0x11    /* banked r8-r14 */
#define MODE_IRQ      0x12
#define MODE_SVC      0x13
#define MODE_MON      0x16
#define MODE_ABT      0x17
#define MODE_UND      0x1B
#define MODE_SYS      0x1F    /* Same as user... */
```

```
// Enter User Mode and set its Stack Pointer
```

```
MSR    CPSR_c, #MODE_USR
MOV    SP, R0
```

```
// Alternative solution if #MODE_USR is undefined
```

```
MRS    R0, CPSR                // load CPSR into register
BIC    R0, R0, #0x1F           // clear the mode field
ORR    R0, R0, #0x10           // set bits for user mode
MSR    CPSR_c, R0
```

```
/*
```

```
    Note that CPSR_c is used instead of CPSR in the MSR instruction,
    to avoid altering the condition code flags.
```

```
*/
```