

```

sdcc -c testparking.hex testparking.rel preemptive.rel
PS C:\Users\josh9\OneDrive\桌面\大三上\OS\109062119-ppc5> make clean
del *.hex *.ihx *.lnk *.lst *.map *.mem *.rel *.rst *.sym *.asm *.lk
PS C:\Users\josh9\OneDrive\桌面\大三上\OS\109062119-ppc5> make
sdcc -c testparking.c
testparking.c:46: warning 158: overflow in implicit constant conversion
testparking.c:49: warning 158: overflow in implicit constant conversion
testparking.c:58: warning 158: overflow in implicit constant conversion
testparking.c:61: warning 158: overflow in implicit constant conversion
testparking.c:79: warning 158: overflow in implicit constant conversion
testparking.c:82: warning 158: overflow in implicit constant conversion
testparking.c:91: warning 158: overflow in implicit constant conversion
testparking.c:94: warning 158: overflow in implicit constant conversion
testparking.c:112: warning 158: overflow in implicit constant conversion
testparking.c:115: warning 158: overflow in implicit constant conversion
testparking.c:124: warning 158: overflow in implicit constant conversion
testparking.c:127: warning 158: overflow in implicit constant conversion
testparking.c:145: warning 158: overflow in implicit constant conversion
testparking.c:148: warning 158: overflow in implicit constant conversion
testparking.c:157: warning 158: overflow in implicit constant conversion
testparking.c:160: warning 158: overflow in implicit constant conversion
testparking.c:178: warning 158: overflow in implicit constant conversion
testparking.c:181: warning 158: overflow in implicit constant conversion
testparking.c:190: warning 158: overflow in implicit constant conversion
testparking.c:193: warning 158: overflow in implicit constant conversion
sdcc -c preemptive.c
preemptive.c:162: warning 85: in function ThreadCreate unreferenced function argument : 'fp'
sdcc -o testparking.hex testparking.rel preemptive.rel

```

```

unsigned char now (void) {
    return time;
}

```

```

#define delay(n)\
    time_temp[cur_thread] = time + n;\
    while( time_temp[cur_thread] != time ){ }\

```

- Based on the above requirement, state your choice of time unit and provide your justification for how you think you can implement a `delay()` that meets the requirement above.
- what does your timer-0 ISR have to do to support these multiple delays and `now()`?
- Count the time unit.
- what if all threads call `delay()` and happen to finish their delays all at the same time? How can you ensure the accuracy of your delay? (i.e., between n and $n+0.5$ time units)?
- $EA = 0$; disable all interrupt.
- How does the worst-case delay completion (i.e., all threads finish delaying at the same time) affect your choice of time unit?
- Too small unit will have wrong answer.

```

void ThreadExit(void) {
    _critical{
        temp = 1 << cur_thread;
        mask ^= temp;
        for(i=0 ; i < 4 ; i++) {
            temp = 1 << i;
            if( mask & temp ){
                cur_thread = i;
                break;
            }
        }
        if(i == 4) {
            while(1){}
        }

        RESTORESTATE;
    }
}

```

Car, in/out, spot1/2, time

1i10

2i20

2o22

1o12

4i12

3i22

4o14

3o24

5i14

1i24

5o16

1o26

2i16

2o18