上課小考

1.請問要利用Keil C撰寫以下程式編繹執行，請問 m,i,j的值為何?

```c
main()
{
  unsigned char  b=0x20,d=0x2f;
  unsigned char  i,j;
   i=!b;
   j=~d;
}
```

```
   i=000, j=0xD0
```

2.請問要利用Keil C撰寫以下程式編繹執行，請問 l,m,i,j,k的值為何?

```c
main()
{
  unsigned char  b=0x7f,d=0x10;
  unsigned char  l,i,j,k,m,n;
    l=d>>2;
    m=b^d;
    i=!b;
    j=~d;
    k=b<<2;
}
```

Name	Location/Value	Type
⊟ ◆ main	C:0x0800	
◆ n	0x00	uchar
◆ m	0x6F 'o'	uchar
◆ k	0xFC '?	uchar
◆ j	0xEF '?	uchar
◆ i	0x00	uchar
◆ l	0x04	uchar
◆ d	0x10	uchar
◆ b	0x7F	uchar

3. 請問若是要利用位元運算子(&, |,~,^)來將特殊暫存器P1的第0 bit(最低位)設定為1以及第6 bit(次高位)設定為0，原P1暫存器其他位元值保留，請用Keil C語法寫出程式。

```
    sfr P1 = 0x90;
    void main()
    {
      unsigned char  i = 0x10;
            loop:
                    P1 = i;
                    P1 = P1 | 0x01;
                    P1 = P1 & ~0x40;
            goto loop;
    }
```

4.請問要利用Keil C撰寫以下程式編繹執行，請問程式執行至最後一行(a)程式的i與(b)程式j
的值為何?

(a) main() { unsigned char *p; unsigned char i=11; p=&i; *p=10; } (b) main() { unsigned char *q; unsigned
char j=11; *q=j; j=j+1;
*q=11; }

```
  (a) a = 10
  (b) b = 12
```