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60+1
2

1. (20%) Please answer the execution process based on IP register.

IP.7	IP.6	IP.5	IP.4	IP.3	IP.2	IP.1	IP.0
0	0	0	0	0	0	0	0

int main()

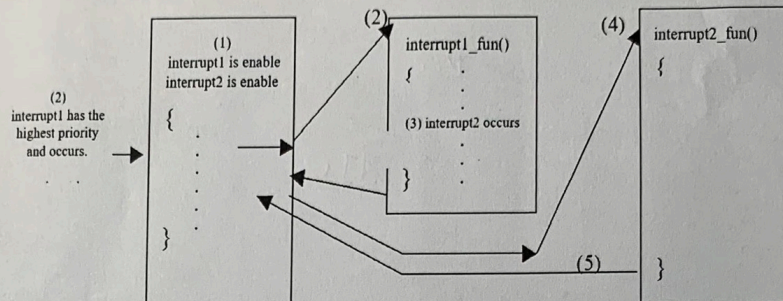
```
{
    p;
    INT0 happens.
    q;
    INT1 happens.
}
```

void EXINT_x() interrupt 0

```
{
    x;
    INT1 happens.
    y;
}
```

void EXINT_y() interrupt 2

```
{
    z;
    w;
}
```



p → x → y → q

p x

-14

2. (20%) If we have LCD_CMD(char cmd) and LCD_DATA(char data) functions for LCDs, please use them to implement the following function DISP_Int(char addr, int v) to show a 4-digit integer number (i.e., v) in the LCD, where addr is a command to specify the display address. Note that the ASCII code of '0' is 0x30.

```
DISP_Int(char addr, int v)
{
    int i;
    for (i=0; i<4; i++) {
        LCD_CMD(addr+4-i);
        LCD_DATA(v%10+0x30);
        v/=10;
    }
}
```

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