HW1. 1435120. 蕉子鸣 、WS404.

Q1: 无符号数: LSR. UDIV. BHI. BLO. BLS. BHS. LDRB. LDRH.

有符号数: SAR. SDIV. BGT. BLT. BLE. BGE. LDRSB. LDRSH.

Q2: 8-bit number:

LDRB. LDRSB. STRB.

16-bit number:

LDRH. LDRSH. STRH.

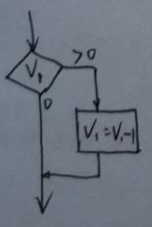
Q3: 将8或16位的数字加载到32位的存储寄存器中；对进行操作后，再转为原来的精度舍入误差更小.

Q4: 第一种写法可以让被函数的作用更容易被理解.

Q5: Public 则是指可被其它函数调用，是共享的；而 Private 则是指不可被其它函数调用是非共享的.

Q6:

流程图:



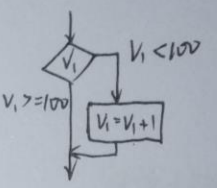
C:

```
while(V1 != 0){
  V1--;
}
```

汇编 ~~Assembly~~:

```
LDR R0,=V1
LDR R1,[R0]
CMP R1,#0
BEQ N0
SUB R1,#1
STR
N0
```

Q7: 流程图:



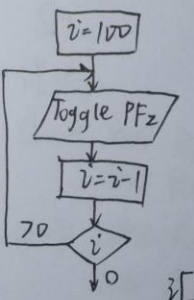
C:

```
if(V1<100){
  V1++;
}
```

汇编:

```
LDR R0,=V1
LDR R1,[R0]
CMP R1,#100
BHS N0
ADD R1,#1
STR R1,[R0]
N0
```

Q8: 流程图:



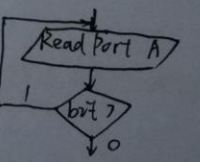
C:

```
~~uint_32~~
uint32_t i;
for(i=100; i>0; i--){
  GPIO_PORTF_DATA_R ^= 0x04;
}
```

汇编:

```
LDR R0,=GPIO_PORTF_DATA_R
MOV R2,#100
Loop LDR R1,[R0]
EOR R1,#0x04
STR R1,[R0]
SUBS R2,#1
BEQ loop.
```

Q9: 流程图:



C: `while(GPIO_PORTA_DATA_R & 0x80){ }`

汇编:

```
LDR R0,=GPIO_PORTA_DATA_R
loop LDR R1,=[R0]
ANDS R1,#0x80
BNE loop.
```