1. cd

   12

2. FEB5_0EE3

3. - 1234_567A_BABE_FEF8
   - 2345_6781_2345_6780
   - 0000_0000_0000_0545

4. 2

5. - 20
   - 4N+1

6. `sb x1, 1(x1)`

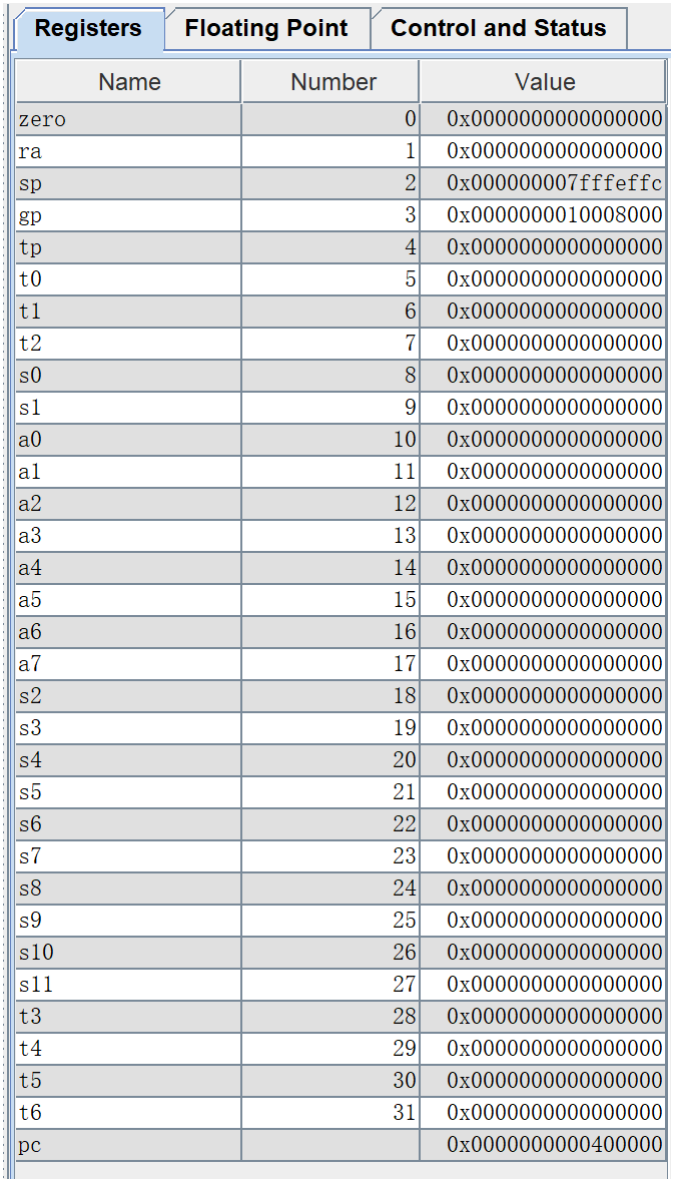
7. - `add x31, x11, x31`
   - `ld x5, 0(x30)`
   - `addi x12, x30, -8`
   - `ld x30, 0(x12)`
   - `add x30, x5, x30`
   - `sd x30, 0(x31)`

8. 代码

```
.data      # 定义一个双字(dword)的10位数组
v:
.dword 4,2,7,5,8,-9,11,32,20,18
.space 10

.text

la, x5, v            # 将数组v基地址存入x5
addi x6, x0, 10      # 将数组长度存入x6
ld x10, 0(x5)        # x10中先存入v[0]，作为临时最大值
jal ra, max          # 跳转到max函数
j Done

max:
addi sp, sp, -40     # 在栈空间中开辟5个双字变量空间
sd ra, 32(sp)        # 保存x1的值（入栈）
sd x22, 24(sp)       # 保存x22的值（入栈）
sd x21, 16(sp)       # 保存x21的值（入栈）
sd x20, 8(sp)        # 保存x20的值（入栈）
sd x19, 0(sp)        # 保存x19的值（入栈）
mv x20, x5           # 复制x10中的值到x21
mv x21, x6           # 复制x11中的值到x22
li x19, 1            #  i = 1
Loop:
bge x19, x21, Exit   # 当i < 10 时进入循环
slli x22, x19, 3     # x22 = i * 8
add x22, x22, x20    # x22 = v + i * 8
ld x7, 0(x22)    # x7 = v[i]
```

```
ble x7, x10, step   # if v[i] <= temp，则跳过更新x10
mv x10, x7      # if v[i] > temp，则更新x10
step:
addi x19, x19, 1    # i = i + 1
j Loop      # 进入循环
Exit:
ld x19, 0(sp)   # 恢复x19(出栈)
ld x20, 8(sp)   # 恢复x20(出栈)
ld x21, 16(sp)  # 恢复x21(出栈)
ld x22, 24(sp)  # 恢复x22(出栈)
ld ra, 32(sp)   # 恢复ra(出栈)
addi sp, sp, 40 # 恢复栈指针
jalr x0, 0(ra)  # 返回调用线程
Done:
```

程序截图



Registers | Floating Point | Control and Status

Name	Number	Value
zero	0	0x0000000000000000
ra	1	0x0000000000000000
sp	2	0x000000007fffeffc
gp	3	0x0000000010008000
tp	4	0x0000000000000000
t0	5	0x0000000000000000
t1	6	0x0000000000000000
t2	7	0x0000000000000000
s0	8	0x0000000000000000
s1	9	0x0000000000000000
a0	10	0x0000000000000000
a1	11	0x0000000000000000
a2	12	0x0000000000000000
a3	13	0x0000000000000000
a4	14	0x0000000000000000
a5	15	0x0000000000000000
a6	16	0x0000000000000000
a7	17	0x0000000000000000
s2	18	0x0000000000000000
s3	19	0x0000000000000000
s4	20	0x0000000000000000
s5	21	0x0000000000000000
s6	22	0x0000000000000000
s7	23	0x0000000000000000
s8	24	0x0000000000000000
s9	25	0x0000000000000000
s10	26	0x0000000000000000
s11	27	0x0000000000000000
t3	28	0x0000000000000000
t4	29	0x0000000000000000
t5	30	0x0000000000000000
t6	31	0x0000000000000000
pc		0x0000000000400000