Consider the following two registers that have the following values:

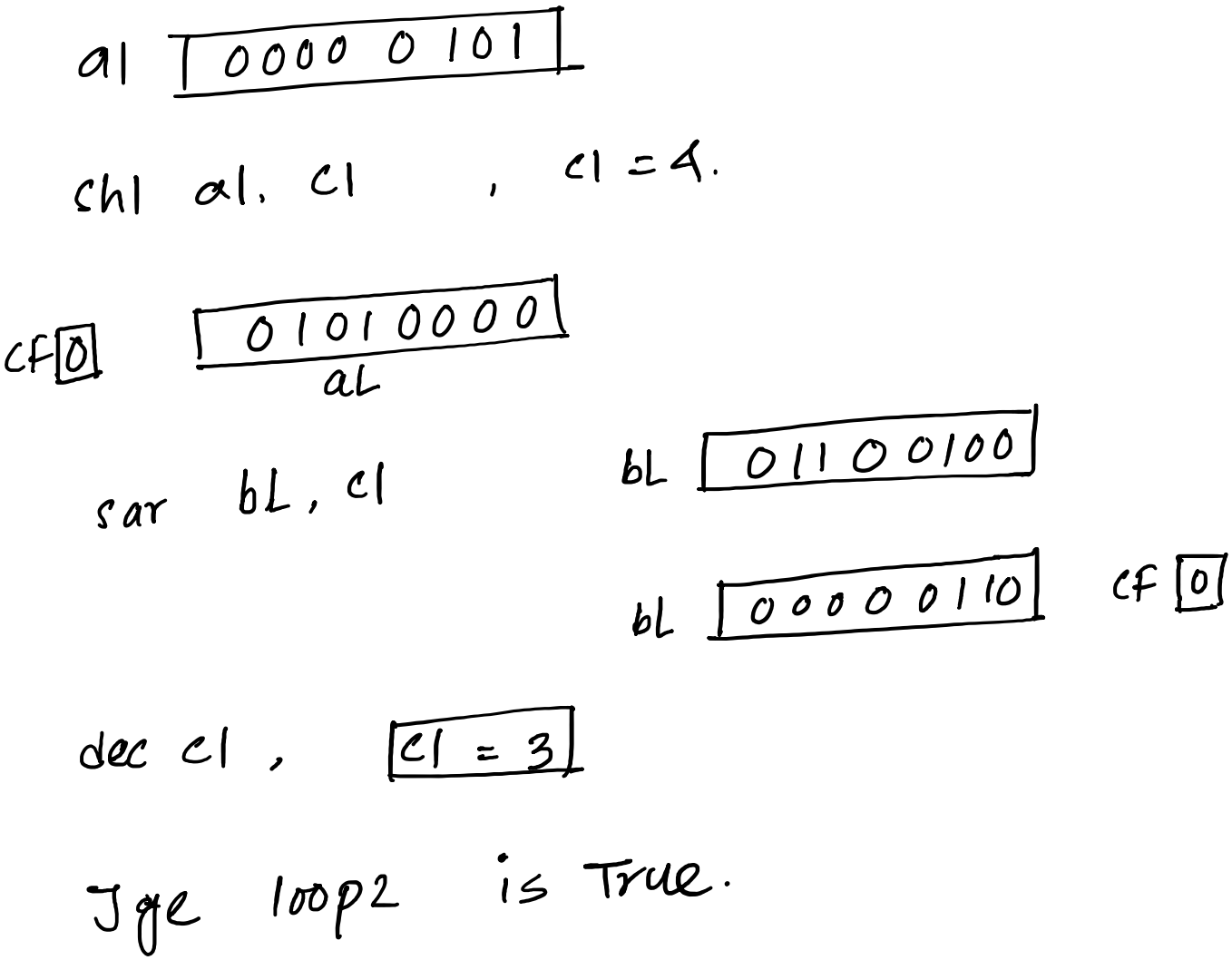
al = 5 and **bl** = 100

What are the **hexadecimal** values for **al** and **bl** after executing the following instructions (show your work)?

```
mov cl,4
loop2:
shl al,cl
sar bl,cl
dec cl
cmp cl, 1
jge loop2
```

Answer: al= , bl=

Answer:



shl al, cl , al [01010000] , cl = 3

CF [0] , al [1000 0000]

sar bl, cl. bl [0000 0110] , cl = 3

bl [00000000] , CF [1]

dec cl . cl = 2

Jge Loop2 is True.

shl al, cl al [1000 0000] , CL=2

CF [0] , al [0000 0000]

sar bl. cl . bl [0000 0000] , CL=2

CF [0] bl [0000 0000]

dec cl, CL = 1

JGe loop2 is True.

shl al, cl. al [00000000]

CF [0] , al [00000000]

sar bl. cl [0000 0000] +
bl

bL [0000 0000] , CF [0]

dec cl , cl = 0

Jge loop2 is false.

al 0000 0000

bl 0000 0000