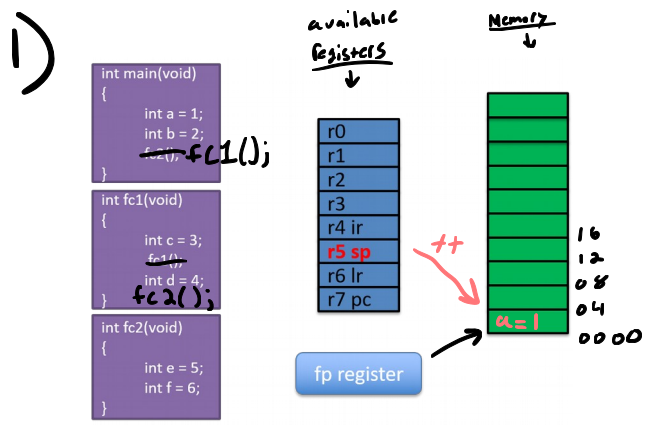
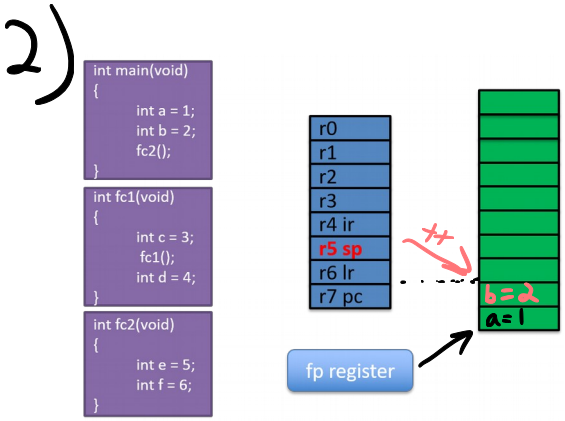
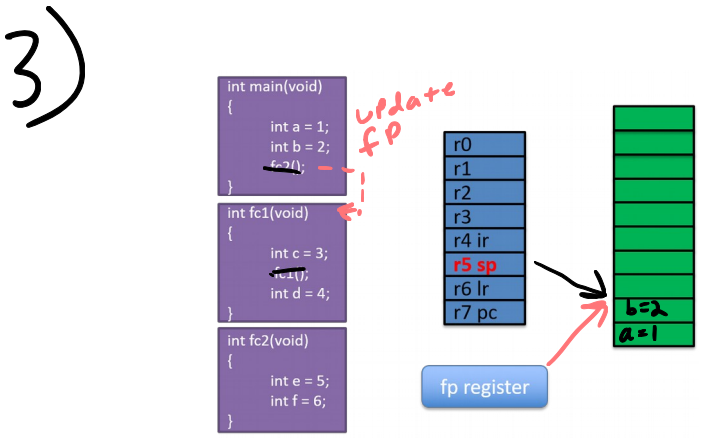
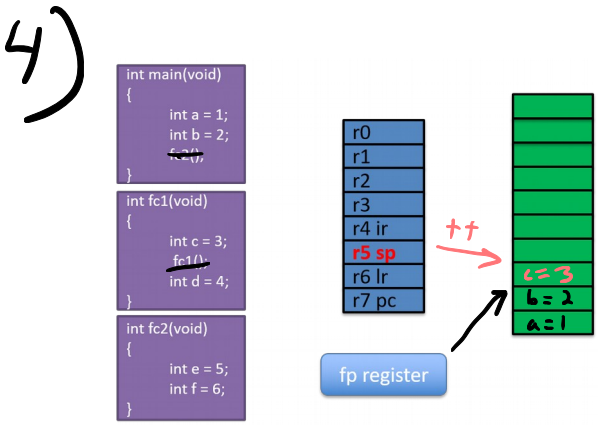
Fill out your main memory address with sp/fp register point (arrow).

Show the FP register status. Shows the flow of the code.









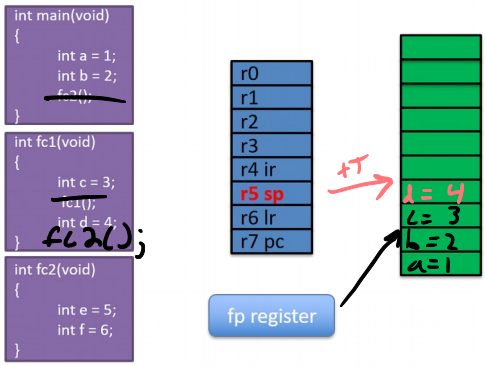
1)

2)

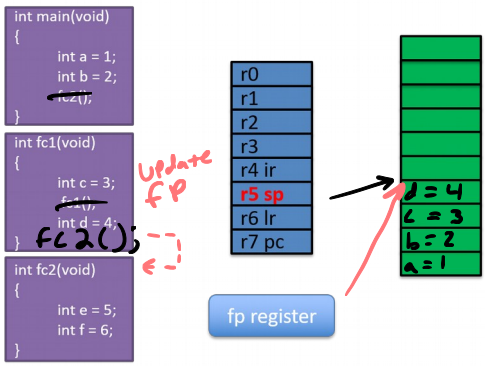
3)

4)

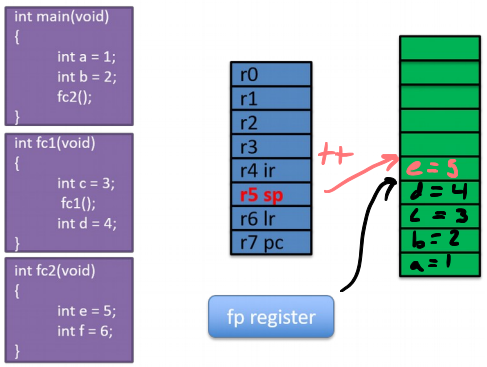
5)


int main(void)
{
int a = 1;
int b = 2;
fc2();
}
int fc1(void)
{
int c = 3;
fc1();
int d = 4;
}
fc2();
int fc2(void)
{
int e = 5;
int f = 6;
}
r0
r1
r2
r3
r4 ir
r5 sp
r6 lr
r7 pc
++
fp register

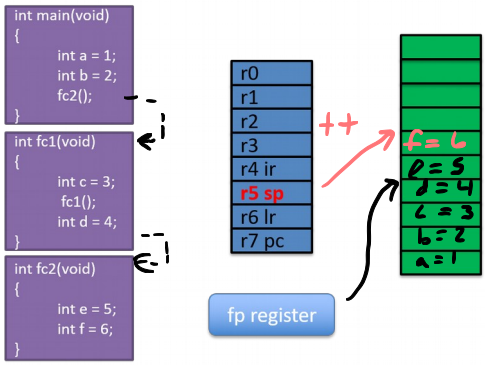
6)


int main(void)
{
int a = 1;
int b = 2;
fc2();
}
int fc1(void)
{
int c = 3;
fc1();
int d = 4;
}
fc2();
int fc2(void)
{
int e = 5;
int f = 6;
}
Update fp
r0
r1
r2
r3
r4 ir
r5 sp
r6 lr
r7 pc
fp register

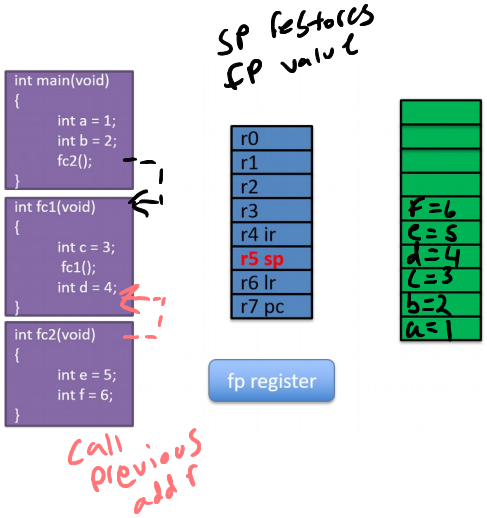
7)


int main(void)
{
int a = 1;
int b = 2;
fc2();
}
int fc1(void)
{
int c = 3;
fc1();
int d = 4;
}
int fc2(void)
{
int e = 5;
int f = 6;
}
r0
r1
r2
r3
r4 ir
r5 sp
r6 lr
r7 pc
++
fp register

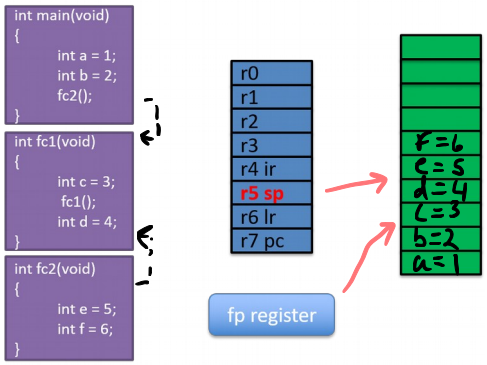
8)


int main(void)
{
int a = 1;
int b = 2;
fc2();
}
int fc1(void)
{
int c = 3;
fc1();
int d = 4;
}
int fc2(void)
{
int e = 5;
int f = 6;
}
r0
r1
r2
r3
r4 ir
r5 sp
r6 lr
r7 pc
++
fp register

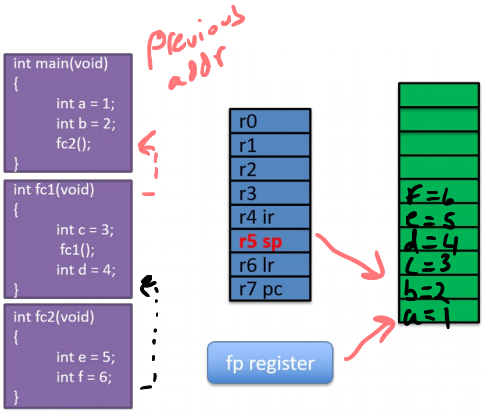
9)


SP restores FP value
int main(void)
{
int a = 1;
int b = 2;
fc2();
}
int fc1(void)
{
int c = 3;
fc1();
int d = 4;
}
int fc2(void)
{
int e = 5;
int f = 6;
}
r0
r1
r2
r3
r4 ir
r5 sp
r6 lr
r7 pc
fp register
Call previous add f

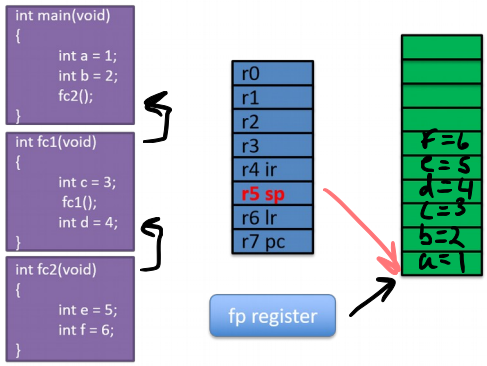
10)


int main(void)
{
int a = 1;
int b = 2;
fc2();
}
int fc1(void)
{
int c = 3;
fc1();
int d = 4;
}
int fc2(void)
{
int e = 5;
int f = 6;
}
r0
r1
r2
r3
r4 ir
r5 sp
r6 lr
r7 pc
fp register

11)


int main(void)
{
int a = 1;
int b = 2;
fc2();
}
int fc1(void)
{
int c = 3;
fc1();
int d = 4;
}
int fc2(void)
{
int e = 5;
int f = 6;
}
previous addr
r0
r1
r2
r3
r4 ir
r5 sp
r6 lr
r7 pc
fp register
f=6
e=5
d=4
c=3
b=2
a=1

12)


int main(void)
{
int a = 1;
int b = 2;
fc2();
}
int fc1(void)
{
int c = 3;
fc1();
int d = 4;
}
int fc2(void)
{
int e = 5;
int f = 6;
}
r0
r1
r2
r3
r4 ir
r5 sp
r6 lr
r7 pc
fp register
f=6
e=5
d=4
c=3
b=2
a=1