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ECGR 3183: Computer Organization

Project 2: Branch Conditions

Source Code:

```
main:
ADDI X1, X2, #5 // set j
ADDI X2, X2, #3 // set k

B multiply // call multiply

ADDI X0, X0, #0 // return 0

multiply: // j=a and k=b
ADD X9, XZR, XZR // set i to 0
ADD X10, XZR, XZR // set r to 0

Loop:

SUBS X11, X9, X2 // check if i < b
B.PL Exit // if positive then exit
ADD X10, X10, X1 // r = r + a
ADDI X9, X9, #1 // i = i + 1
B Loop

Exit:
STUR X10, [X28,#0]
```