

```

int mult(int a,int b){
    int c=a,i=1;
    while(c>=i){
        a=a+b;
        a--;
        i++;
    }
    return a;
}

int pot(int x,int y){
    int acu=b;
    while(y>0){
        acu=mult(x,acu);
        y--;
    }
    return acu;
}

int main(){
    int x=5,y=3;
    return pot(x,y);
}

```

a=%l0 , b=%l1 , c=%l2 , x=%l3 , y=%l4 , acu=%l5

```

multiplicación
0x0000    add    %l3, %g0 , l0
0x0004    add    %l5 , %go ,%l3
0x0008    mov    %go , %l2
while
0x000c    cmp    %l1 , 0
0x0010    add    %l2 , %l0 , %l2
0x0014    bne    while1
0x0018    subcc  %l1 , 1 , %l1
0x001c    jmp    %07, 4*1 , %g0
0x0020    add    %l2 , %g0 , %o0
potencia
0x0024    add    %l3 , %g0 , %l5
while
0x0028    cmp    %l4 , 1
0x002c    call   multiplicación
0x0030    add    %o0 , %g0 , %l5
0x0034    ba     while
0x0038    subcc  %l4 , 1 , %l4
0x003c    add    %07 , %g0 , %l6
0x0040    jmp    %l6 , 4*1 , %g0
0x0044    add    %l5 , %g0 , %o1

```

```

main
0x0048      mov 5 , %l3
0x004c      mov 3 , %l4
0x0050      call potencia
0x0054      add %o1 , %g0 , %o0
0x0058      nop

```

```

10 | 10000 | 000000 | 10011 | 0 | 00000000 | 00000 |
10 | 10011 | 000000 | 10101 | 0 | 00000000 | 00000 |
10 | 10010 | 000010 | 00000 | 0 | 00000000 | 00000 |

```

While

```

10 | 00000 | 010100 | 10001 | 1 | 00000000 | 00000 |
10 | 10010 | 000000 | 10010 | 0 | 00000000 | 10000 |
00 | a | 1001 | 010 | 000000000000000000000000
10 | 10001 | 010100 | 10001 | 1 | 00000000000001 |
10 | 00000 | 111000 | 01111 | 0 | 00000000 | 11100 |
10 | 01000 | 000000 | 10010 | 0 | 00000000 | 00000 |

```

Potencia

```

10 | 10101 | 000000 | 10011 | 0 | 00000000 | 00000 |

```

While

```

10 | 00000 | 010100 | 10100 | 1 | 00000000000001 |
01 | 000000000000000000000000000000000000000000
10 | 10101 | 000000 | 01000 | 0 | 00000000 | 00000 |
00 | a | 1000 | 00000000000000000000000000000000
10 | 10100 | 010100 | 10100 | 1 | 00000000000001 |
10 | 10110 | 000000 | 01111 | 0 | 00000000 | 00000 |
10 | 00000 | 111000 | 10110 | 1 | 0000000011100 |
10 | 01000 | 000000 | 10101 | 0 | 00000000 | 00000 |

```

Main

```

10 | 00000 | 000010 | 10011 | 1 | 00000000000101 |
10 | 00000 | 000010 | 10100 | 1 | 00000000000011 |
01 | 000000000000000000000000000000000000000000
10 | 01000 | 000000 | 01001 | 000000 | 00000 |

```