

```

int f(int x, int y) {
    int b = x;
    int e = y;
    int r = 1;

    while (e > 1) {
        if (e % 2 == 1) {
            r = b * r;
        }
        b = b * b;
        e = e / 2;
    }
    return r * b;
}

```

x	2	5					
y	8	3					
result							

iteration	b	e	r
0	2	8	1
1			
2			
3			
4			

iteration	b	e	r
0			
1			
2			
3			
4			

iteration	b	e	r
0			
1			
2			
3			
4			

iteration	b	e	r
0			
1			
2			
3			
4			