

```

1000 fe,01,01,13 add sp,sp,-32
1004 00,11,2e,23 sw ra,28(sp)
1008 00,50,07,93 li a5,5
1012 00,f1,26,23 sw a5,12(sp)
1016 00,60,07,93 li a5,6
1020 00,f1,24,23 sw a5,8(sp)
1024 00,81,25,83 lw a1,8(sp)
1028 00,c1,25,03 lw a0,12(sp)
1032 01,c0,00,ef jal 1060 # +28
1036 00,a1,22,23 sw a0,4(sp)
1040 00,41,27,83 lw a5,4(sp)
1044 00,07,85,13 mv a0,a5
1048 01,c1,20,83 lw ra,28(sp)
1052 02,01,01,13 add sp,sp,32
1056 00,00,00,67 ret

```

```

int main(void) {
    int x = 5;
    int y = 6;
    int r = add(x,y);

    return r;
}

```

```

1060 fe,01,01,13 add sp,sp,-32
1064 00,11,2e,23 sw ra,28(sp)
1068 00,a1,26,23 sw a0,12(sp)
1072 00,b1,24,23 sw a1,8(sp)
1076 00,81,27,83 lw a5,8(sp)
1080 00,07,96,63 bnez a5,1092 # +12
1084 00,c1,27,83 lw a5,12(sp)
1088 02,40,00,6f j 1124 # +36
1092 00,c1,27,83 lw a5,12(sp)
1096 00,17,07,13 add a4,a5,1
1100 00,81,27,83 lw a5,8(sp)
1104 ff,f7,07,93 add a5,a5,-1
1108 00,07,85,93 mv a1,a5
1112 00,07,05,13 mv a0,a4
1116 fc,9f,f0,ef jal 1060 # -56
1120 00,05,07,93 mv a5,a0
1124 00,07,85,13 mv a0,a5
1128 01,c1,20,83 lw ra,28(sp)
1132 02,01,01,13 add sp,sp,32
1136 00,00,00,67 ret

```

```

int add(int a, int b) {
    if (b == 0) {
        return a;
    }

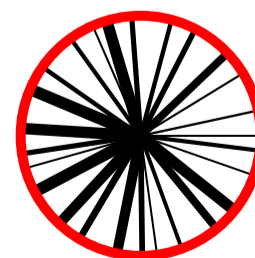
    return add(a + 1, b - 1);
}

```

```

1140 00,00,00,00
1144 00,00,00,00
1148 00,00,00,00
1152 00,00,00,00
1156 00,00,00,00
1160 00,00,00,00
1164 00,00,00,00
1168 00,00,00,00
1172 00,00,00,00
1176 00,00,00,00
1180 00,00,00,00
1184 00,00,00,00
1188 00,00,00,00

```



PROJEKT: INIT0
<https://punkx.org/overflow>

license: CC BY 4.0
copyright: jackdoe 2023
file: code/12-recursion-0.c