

```

int m, n;

misgreater()
{
    if (m = n) return m;
    else
    {
        m -= n;
        if (m > n)
            return misgreater();
        else
            return nisgreater();
    }
}

nisgreater()
{
    if (n = m) return n;
    else
    {
        n -= m;
        if (n > m)
            return nisgreater();
        else
            return misgreater();
    }
}

main()
{
    int x;

    read m, n;    <-- assume that you read 15 and 12
    if (m > n)
        x = misgreater();
    else
        x = nisgreater();

    print x;
}

```

Nr.	Code	Comments
0	SET 0, 4	
1	SET 1, 7	
2	SET 2, READ	read m
3	SET 3, READ	read n
4	JUMPT 13, D[2] <= D[3]	
5	SET 1, D[1] + 1	Calling sequence for misgreater(.) starts
6	SET D[1], 11	
7	SET D[1]+1, D[0]	
8	SET 0, D[1]	
9	SET 1, D[1] + 2	Jump into misgreater(.), calling sequence ends
10	JUMP 22	
11	SET 6, D[D[1]]	
12	JUMP 20	
13	SET 1, D[1] + 1	Calling sequence for nisgreater(.) starts
14	SET D[1], 19	
15	SET D[1]+1, D[0]	
16	SET 0, D[1]	
17	SET 1, D[1] + 2	
18	JUMP 45	Jump into nisgreater(.), calling sequence ends
19	SET 6, D[D[1]]	
20	SET WRITE, D[6]	
21	HALT	
<hr/>		
22	JUMPT 25, D[2] <> D[3]	Code segment for misgreater(.)
23	SET D[0]-1, D[2]	Return m
24	JUMP 42	
25	SET 2, D[2] - D[3]	
26	JUMPT 35, D[2] <= D[3]	
27	SET 1, D[1] + 1	Calling sequence for misgreater(.) starts
28	SET D[1], 33	
29	SET D[1]+1, D[0]	
30	SET 0, D[1]	
31	SET 1, D[1] + 2	
32	JUMP 22	Jump into misgreater(.), calling sequence ends
33	SET D[0]-1, D[D[1]]	
34	JUMP 42	
35	SET 1, D[1] + 1	Calling sequence for nisgreater(.) starts
36	SET D[1], 41	
37	SET D[1]+1, D[0]	
38	SET 0, D[1]	
39	SET 1, D[1] + 2	
40	JUMP 45	Jump into nisgreater(.), calling sequence ends
41	SET D[0]-1, D[D[1]]	
42	SET 1, D[0] - 1	
43	SET 0, D[D[0] + 1]	
44	JUMP D[D[1] + 1]	
<hr/>		
45	JUMPT 48, D[3] <> D[2]	Code segment for nisgreater(.)
46	SET D[0]-1, D[3]	
47	JUMP 65	

48	SET 3, D[3] - D[2]	
49	JUMPT 58, D[3] <= D[2]	
50	SET 1, D[1] + 1	Calling sequence for nisgreater(.) starts
51	SET D[1], 56	
52	SET D[1]+1, D[0]	
53	SET 0, D[1]	
54	SET 1, D[1] + 2	
55	JUMP 45	Jump into nisgreater(.), calling sequence ends
56	SET D[0]-1, D[D[1]]	
57	JUMP 65	
58	SET 1, D[1] + 1	Calling sequence for misgreater(.) starts
59	SET D[1], 64	
60	SET D[1]+1, D[0]	
61	SET 0, D[1]	
62	SET 1, D[1] + 2	
63	JUMP 22	Jump into misgreater(.), calling sequence ends
64	SET D[0]-1, D[D[1]]	
65	SET 1, D[0] - 1	
66	SET 0, D[D[0] + 1]	
67	JUMP D[D[1] + 1]	

Nr.	Content	Comments
0	4 / 8 / 11 / 14 / 17 / 20 / 17 / 14 / 11 / 8 / 4	current
1	7 / 8 / 10 / 11 / 13 / 14 / 16 / 17 / 19 / 20 / 22 / 19 / 16 / 13 / 10 / 7	free
2	15 / 3	m
3	12 / 9 / 6 / 3	n
4		RP
5		DL
6	3	x
7	3	return value
8	11	RP
9	4	DL
10	3	return value
11	41	RP
12	8	DL
13	3	return value
14	56	RP
15	11	DL
16	3	return value
17	56	RP
18	14	DL
19	3	return value
20	64	RP
21	17	DL