



Date

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An assembly language program to find the smallest Hardy-Ramanujan number.

LABELOPCODE

1. MVI CH, 00

2. MVI C, 01

START: 3. INR D

LOOP1: 5. MOV B, 01

6. MUL B, D

7. MUL B, D

8. MUL B, D

9. SBN B, C, 23

10. MOV H, D

L2: 11. INR H

12. MOV E, 01

13. MUL E, H

14. MUL E, H

15. MUL E, H

16. SBN E, C, 4

17. ADD B, E

18. CMP A, C

19. JNE L2

/* jump if not equal */

20. INR CH

21. CMP CE, 2

22. JE EXIT

23. INR C

24. JMP START

EXIT: 25. HLT