

# COL216 Assignment 1

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## 1 Space occupied by the program

The space occupied by the program in terms of the number of instructions is **40** instructions  $\times$  **32** bits.

## 2 Space Used for data in terms of number of words

The program being of size 40 instructions occupies **memory locations of word size 32 bits** starting from memory address **0x00 to 0x9C**. The data output for  $n$  Hardy-Ramanujan Numbers starts from memory address 0x1000 and occupies **n memory locations of word size 32**.

## 3 Execution time of the program (in terms of number of instructions executes)

The code was run for the below mentioned values of n:

n	No. of Instructions executed
1	442
25	7965362
50	33213031
100	224572099

## 4 Execution time of the program (in hours/minutes/seconds)

The code was run for the below mentioned values of n:

n	Execution Time (mm:ss)
1	00:00.32
25	00:04.29
50	00:19.94
100	02:18.1