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| **Address** | | **Mnemonic** | **Code** |  | **Instruction Description** |
| 00 | | LDA 99 | 599 |  | ;Load with ZERO to initialize multi run program |
| 01 | | STO 96 | 396 |  | ;Store SUM |
| 02 | | IN | 901 |  | ;Input provided by user |
| 03 | | BRZ 95 | 795 |  | ;Branch if Zero to HLT |
| 04 | | BRP 06 | 806 |  | ;Branch if positive or zero |
| 05 | | BR 95 | 695 |  | ;Branch Unconditional to HLT |
| 06 | | STO 98 | 398 |  | ;Store Input in N |
| 07 | | ADD 96 | 196 |  | ;Add SUM to N |
| 08 | | STO 96 | 396 |  | ;Store SUM |
| 09 | | LDA 98 | 598 |  | ;Load N |
| 10 | | SUB 97 | 297 |  | ;Subtract ONE from N |
| 11 | | BRZ 13 | 713 |  | ;Branch if Zero to print result |
| 12 | | BR 06 | 606 |  | ;Branch Unconditional to continue loop |
| 13 | | LDA 96 | 596 |  | ;Load SUM |
| 14 | | OUT | 902 |  | ;Output SUM |
| 15 | | BR 00 | 600 |  | ;Branch to get next N |
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| 95 | | HLT | 000 |  | ;Halt |
| 96 | | DAT 00 | 000 |  | ;Data Storage Location SUM |
| 97 | | DAT 00 | 001 |  | ;Data Storage Location ONE |
| 98 | | DAT 00 | 001 |  | ;Data Storage Location N |
| 99 | | DAT 00 | 000 |  | ;Data Storage Location ZERO |
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| **Address** | **Mneumonic** | **Value** | **Instruction Description** |
| 00 | IN | 901 | ;Input provided by user |
| 01 | BRP 06 | 806 | ;Branch if positive or zero |
| 02 | LDA 99 | 599 | ;Load ZERO |
| 03 | ADD 97 | 197 | ;Add ONE if Negative |
| 04 | STO 98 | 398 | ;Store NEG |
| 05 | BR 08 | 608 | ;Branch Unconditional to print |
| 06 | LDA 99 | 599 | ;Load ZERO |
| 07 | STO 98 | 398 | ;Store NEG |
| 08 | OUT | 902 | ;print result |
| 09 | HLT | 000 | ;HALT |
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| 97 | DAT 01 | 001 | ;Data Storage Location ONE |
| 98 | DAT 00 | 000 | ;Data Storage Location NEG |
| 99 | DAT 00 | 000 | ;Data Storage Location ZERO |
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