|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Symbol Table (ST) ($) | | | | |
| Sr. No. | Sym. name | Val/addr | Leng. | relocation |
| 1 | PROG | 100 | 1 | R  // Input file “PROG.asm”  1. PROG START 100  2. USING \*,15  3. L 1,FIVE  4. A 1,=F’4’  5. ST 1,RES  6. LTORG  7. FIVE DC F’5’  8. RES DS 2F  9. END |
| 2 | FIVE | 116 | 4 | R |
| 3 | RES | 120 | 8 | R |

|  |  |  |  |
| --- | --- | --- | --- |
| **M/c Operation Table (MOT)** | | | |
| **Mnemonic** | **Hex code** | **Leng.** | **Format** |
| **L** | **5A** | **4** | **RX** |
| **A** | **5B** | **4** | **RX** |
| **ST** | **5C** | **4** | **RX** |

// Targe code- output of pass-2

LC statements

100 5A 1, 16 (15,0)

104 5B 1, 12(15,0)

108 5C 1, 20(15,0)

112 4

116 5

120 --------------

128

|  |  |
| --- | --- |
| Pseudo Operation Table (POT) | |
| Pseudo code | Address of routine |
| START | P\_START() |
| USING | P\_USING() |
| DC | P\_DC() |
| DS | P\_DS() |
| END | P\_END() |
| LTORG | P\_LTORG |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Literal Table (LT) (@) | | | | |
| Sr. No. | Literal name | Val/addr | Leng. | relocation |
| 1. | =F’4’ | 112 | 4 | R |
|  |  |  |  |  |

|  |  |  |
| --- | --- | --- |
| **Base Table** | | |
| **0** | **N** | **-1** |
| **1** | **N** | **-1** |
| **:** | **N** | **-1** |
| **15** | **Y** | **100** |

Off=120-100

5C 1, 20(15,0)

Hex\_code=5C, Len=4, Format=RX

// IR code- output of pass-1

LC Statement

100 PROG START 100

100 USING \*,15

100 L 1, $2

104 A 1, @1

108 ST 1, $3

112 =F’4’

116 FIVE DC F’5’

120 RES DS 2F

128 END