**Problem –** Write an assembly language program for calculating the factorial of a number using 8086 microprocessor

**Program –**

| **ADDRESS** | **MNEMONICS** | **COMMENTS** |
| --- | --- | --- |
| 0400 | MOV CX, [0500] | CX <- [0500] |
| 0404 | MOV AX, 0001 | AX <- 0001 |
| 0407 | MOV DX, 0000 | DX <- 0000 |
| 040A | MUL CX | DX:AX <- AX \* CX |
| 040C | LOOP 040A | Go To [040A] till CX->00 |
| 0410 | MOV [0600], AX | [0600]<-AX |
| 0414 | MOV [0601], DX | [0601]<-DX |
| 0418 | HLT | Stop Execution |