

Unit 4
LECTURE 3

Binary to ASCII CODE CONVERSION

Problem statement: WAP to convert the content of 5 memory locations starting from 2000H into ASCII character. Place the result in five memory locations starting from 2200H.

```
LXI SP, 27FFH
```

```
LXI H, 2000H
```

```
LXI D, 2200H
```

```
MVI C, 05H
```

```
X: MOV A,M
```

```
CALL ASCII
```

```
STAX D
```

```
INX H
```

```
INX D
```

```
DCR C
```

```
JNZ X
```

```
HLT
```

```
ASCII:CPI 0AH
```

```
JNC Y
```

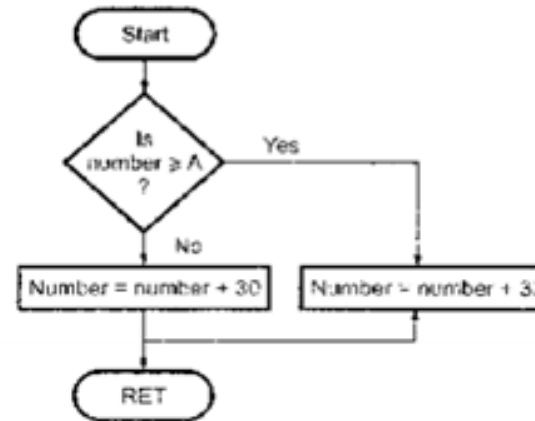
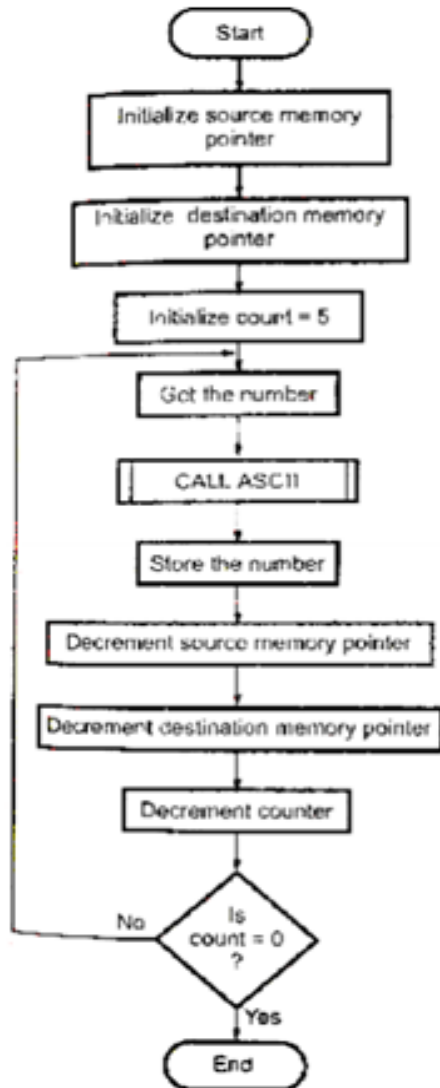
```
ADI 30H
```

```
JMP Z
```

```
Y: ADI 37H
```

```
Z: RET
```


Flowchart for binary to ASCII



ASCII to Binary CODE CONVERSION

Problem statement: WAP to convert the content of 5 memory locations starting from 2000H into Binary code. Place the result in five memory locations starting from 2200H.

```
LXI SP, 27FFH
LXI H, 2000H
LXI D, 2200H
MVI C, 05H
X: MOV A,M
CALL ASCII
STAX D
INX H
INX D
DCR C
JNZ X
HLT
```



```
ASCII:CPI 3AH
JNC Y
SUI 37H
JMP Z
Y: SUI 30H
Z: RET
```

Flowchart for ASCII to binary

