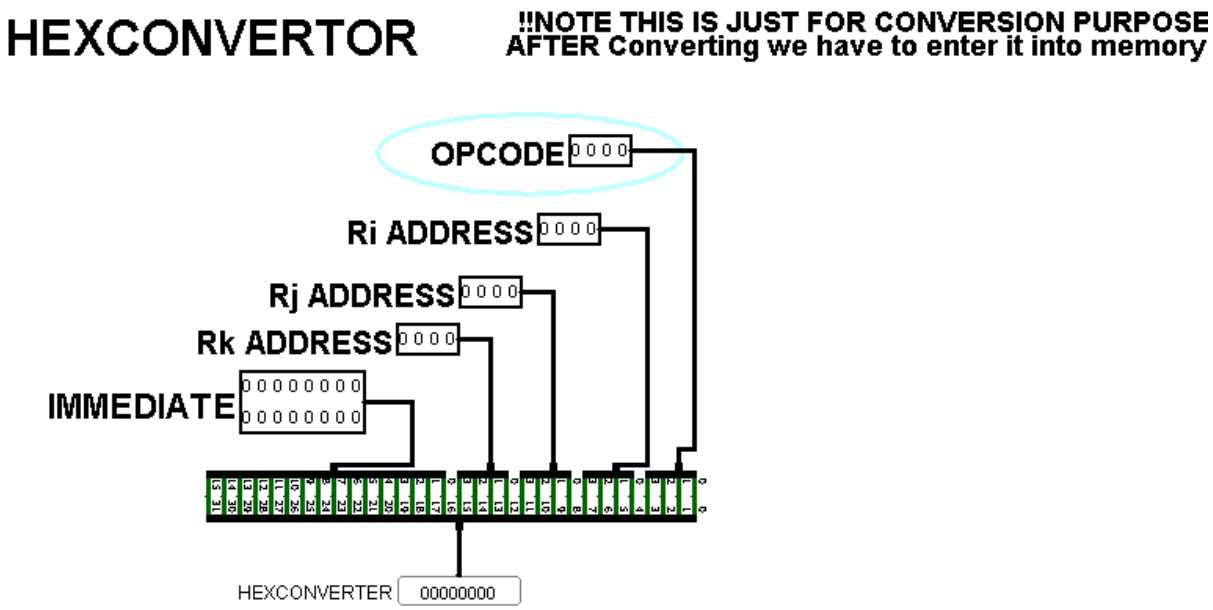
README FILE

KOLLI JOGENDRA DURGA PRASAD

How to use the circuit

1) For each instruction one have to enter the binary code into respective slots in the **hex converter** (which is provided in the circuit)which will convert it into hexadecimal code
2) After converting every binary code into hexadecimal then enter the hexadecimal code into the memory



Example :-

Suppose we have two instructions to perform

LOAD R1,X(R2)(where x is 2)

ADD R1,R2,R3

Step 1:

LOAD R1,X(R2)

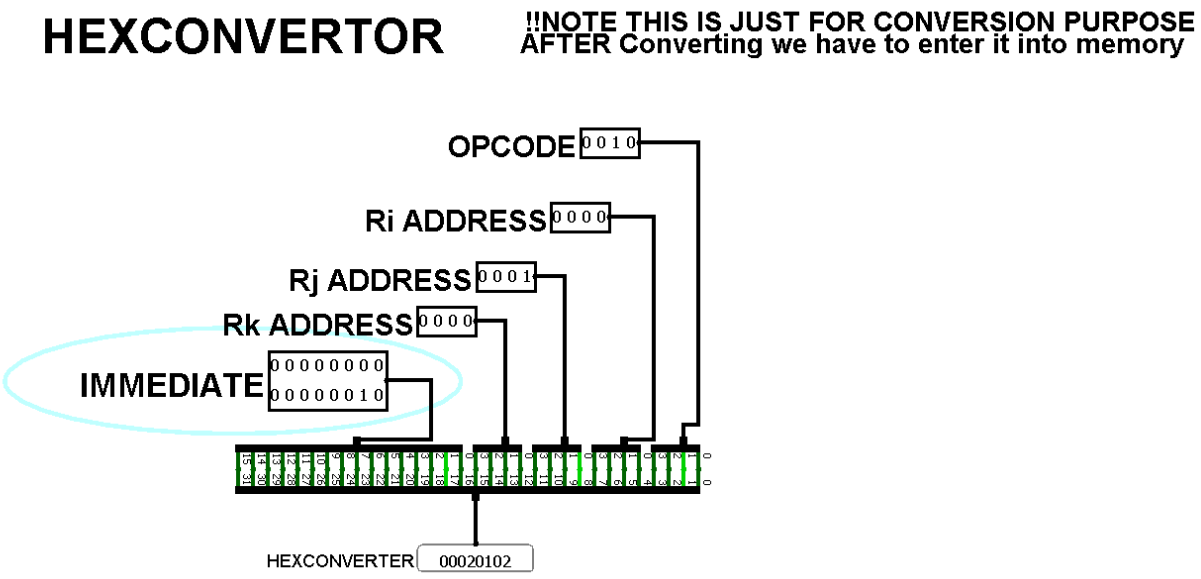
LOAD-->0010

Ri ADDRESS=R1=0000(fill it in the Ri ADDRESS slot in Hex converter)

Rj ADDRESS=R2=0001(fill it in the Rj ADDRESS slot in Hex converter)

Rk ADDRESS=Not present=keep it as 0000(fill it in the Rk ADDRESS slot in Hex converter) (It is not used any way)

Immediate =X=00000010(fill it in the immediate slot in Hex converter)



ADD R1,R2,R3

ADD-->0100

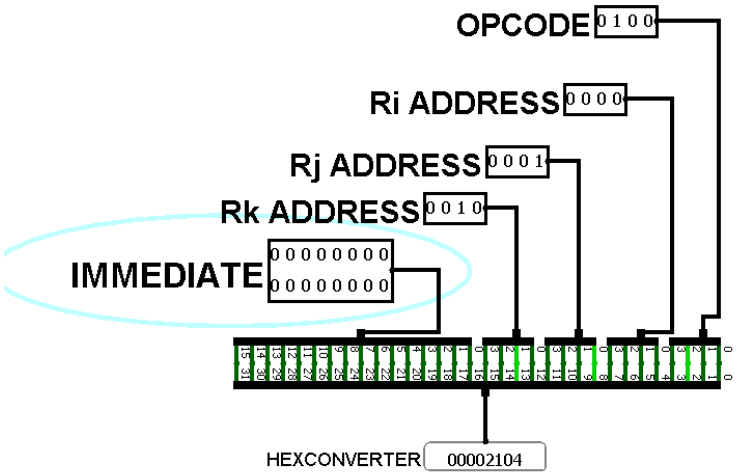
Ri ADDRESS=R1=0000(fill it in the Ri ADDRESS slot in Hex converter)

Rj ADDRESS=R2=0001(fill it in the Rj ADDRESSslot in Hex converter)

Rk ADDRESS=R3=0010(fill it in the Rk ADDRESS slot in Hex converter)

Immediate =not present=keep it as 00000000(fill it in the immediate slot in Hex converter)

HEXCONVERTOR **!!NOTE THIS IS JUST FOR CONVERSION PURPOSE AFTER Converting we have to enter it into memory**



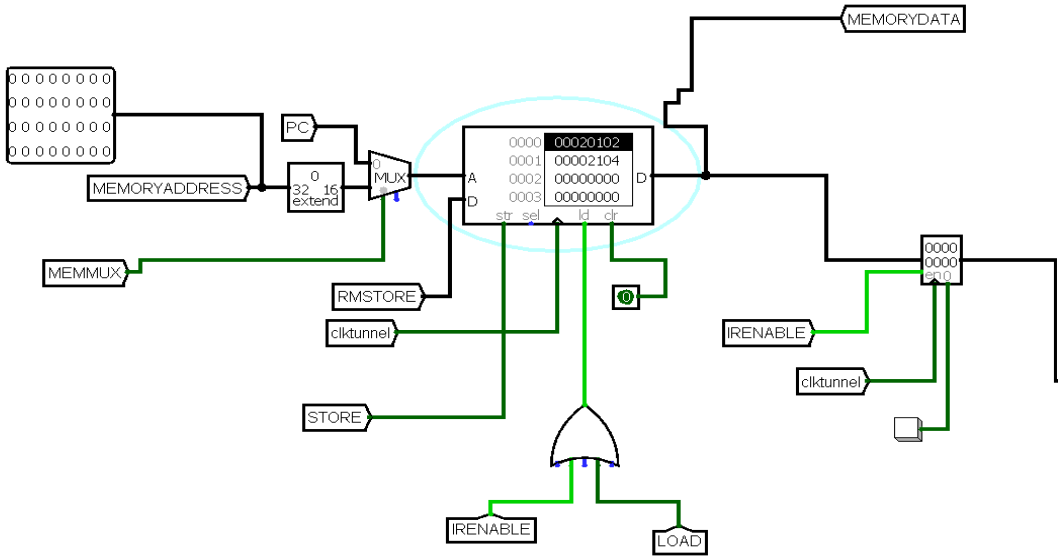
Points to be noted

1) If we don’t use a certain slot in the converter then make sure it is filled with only zero’s
2) Ex:- suppose in hlt we only use opcode slot ,so remaining all slots should be zeros.
3) Ex2:- In MVI we use Ri and immediate slots, so remaining all slots should be only filled with zeros

STEP 2:

After converting everything into hexadecimal code enter it into memory(we have entered 0020102 and 0002104 which we have got earlier from hex converter for LOAD and ADD instructions)

----------**MEMORY**------



Use clock to start the process, after the clock starts running every instruction we stored in the memory will be executed .