Input

Cartridges = {cartridge1, cartridge2, cartridge3……}.

Output

Store that cartridges in Robotic Tape Library (on particular positions).

Algorithm

Step1:- Determine the overflow condition of Robotic Tape Library (RTL) if it is full generate the Error message that RTL is FULL and go to **Step18**

Step2:- Read the total number of cartridges which user wants to feed in RTL and store it in nIP.

Step3:- Check that user enter the value in nIP only in multiples of 10 otherwise prompt user to Renter the value.

Step4:- Determine the overflow condition of odd panel of RTL then go to **Step5** otherwise go to **Step11**.

Step5:- Update the value of c which is updated with the help of IOstack i.e. inp[10] which is Length 10.

Step6:- Check if c is equal to 0 or not if yes then go to the **Step7** otherwise go to **Step18**.

Step7:- Read the barcode of c_{th} cartridges and decrement the value of c.

Step8:- Make delay of approximate 2sec and then store the value in IOstack i.e. inp1[].

Step9:- Store the cartridges to the posi and posj position of oddTempMatrix and od and n.

Step10:- Update posi, posj which determine the nearest empty position in RTL, upper and lower position status of RTL.

Step11:- Check overflow condition of odd panel, if it is full then check overflow condition of even panel if it is full then go to **Step1** otherwise go to **Step12** if free space is available.

Step12:- Check if c is equal to 0 or not if yes then go to the **Step13** otherwise go to **Step18**.

Step13:- Read the barcode of c_{th} cartridges and decrement the value of c.

Step14:- Make delay of approximate 2sec and then store the value in IOstack i.e. inp1[].

Step15:- Store the cartridge to the posi and posj position of evenTempMatrix.

Step16:- Update posi, posj, en and n.

Step17:- Go to **Step11**.

Step18:- End of the program.

NOTE:- Assumptions

evenTempMatrix[39][5] ← 0, oddTempMatrix[39][5] ←0,
evenMatrix[20][5] ←0,oddMatrix[20][5] ←0,
inp1[10] ←0,n←0,en←0,od←0,
posi←0,posj←0,c←0,x←0,
nIP←0,id1←0 ,id2←0,id3←0