**Practical No: - 1**

**Aim:Write a program to implement the single layer perceptron.**

**Code:**

#include<stdio.h>

#include<conio.h>

void main()

{

intIn,b[20],wt[20],er,i,n,m;

clrscr();

printf("\n enter size");

scanf("\n %d",&m);

printf("\n enter input values ");

for(i=0;i<m;i++)

{

scanf("\n %d",&b[i]);

}

printf("enter value of weight");

for(i=0;i<m;i++)

{

scanf("\n %d",&wt[i]);

}

printf("enter desired weight");

scanf("\n %d",&er);

do

{

I=0;

for(i=0;i<m;i++)

{

I=b[i]\*wt[i]+In;

}

printf("\n input is %d",In);

if(In>er)

{

for(i=0;i<m;i++)

{

wt[i]=wt[i]-1;

}

}

else

{

for(i=0;i<m;i++)

{

wt[i]=wt[i]+1;

}

}

printf("\nto continue: yes=1\n no=0\n");

scanf("\n %d",&n);

}

while(n==1);

printf("\n final weights are");

for(i=0;i<m;i++)

{

printf("\n %d",wt[i]);

}

getch();

}

**Output:**

