Experiment No: 2c

NORMALIZATION

Aim:

Write a c program to implement the decimal scaling normalization.

Decimal Scale Normalization:

In decimal scale normalization, transform the data by moving the decimal points of values of attribute A. The number of decimal points moved depends on the maximum absolute value of A.A value V of A is normalized to v1 by computing.

V 1 = V /10j

Where j is smallest integer such that max (v)< 1.

Steps:
l)Consider age attribute as
A=l0 20 15 30 50 55
2) To find out Normalization by decimal scaling
V'= v/10j

V=actual value
V'=transformed value
J=positive integer & j should be selected such that max value
lvl l<1.
If max value 0-100 then j=2
Here max= 55
J=2 100
V=10
v1=10110*1o
=0.1
V=20
V=30
V=15
V=50
V=55

V1 = 20/10*10 =0.2

V 1 = 30/10*10 =0.3

v 1 =1 5/10*1o =0.15

V1= 50/10*10 =0.5

v1= s s11 0*1o =0.55

A Decimal scaling(A)
10 0.1

20 0.2
30 0.3
15 0.15
50 0.5
55 0.55

Program:

```
#include<stdio.h>
#include<math.h>
#include<stdlib.h>
int main()
{
float vd=2;
int j=1,v;
printf("enter v value:");
scanf("%d",&v);
v=abs(v);
while(vd>=1)
{
vd=v/pow(10,j);
j++;
}
printf("value of v' is %f\n",vd);
}
```

OUTPUT: