Answer to the question no 1

E.D. (x,1) = $\sqrt{(164-158)2 + (68-58)2}$ = 11.66

E.D. (x,2) = $\sqrt{(164-158)2 + (68-59)2}$ = 10.82

E.D. (x,3) = $\sqrt{(164-158)2 + (68-63)2}$ = 7.81

E.D. (x,4) = $\sqrt{(164-160)2 + (68-59)2}$ = 9.85

E.D. (x,5) = $\sqrt{(164-160)2 + (68-60)2}$ = 8.94

E.D. (x,6) = $\sqrt{(164-163)2 + (68-60)2}$ = 8.06

E.D. (x,7) = $\sqrt{(164-163)2 + (68-61)2}$ = 7.07

E.D. (x,8) = $\sqrt{(164-160)2 + (68-64)2}$ = 5.66

E.D. (x,9) = $\sqrt{(164-163)2 + (68-64)2}$ = 4.12

E.D. (x,10) = $\sqrt{(164-165)2 + (68-61)2}$ = 7.07

E.D. (x,12) = $\sqrt{(164-165)2 + (68-65)2}$ = 3.16

E.D. (x,13) = $\sqrt{(164-168)2 + (68-62)2}$ = 7.21

E.D. (x,14) = $\sqrt{(164-168)2 + (68-63)2}$ = 6.40

E.D. (x,15) = $\sqrt{(164-168)2 + (68-66)2}$ = 4.47

E.D. (x,16) = $\sqrt{(164-170)2 + (68-63)2}$ = 7.81

E.D. (x,17) = $\sqrt{(164-170)2 + (68-64)2}$ = 7.21

E.D. (x,18) = $\sqrt{(164-170)2 + (68-68)2}$ = 6

Order:

Row	Euclidian Distance	Class
12	3.16	L
9	4.12	L
15	4.47	L
8	5.66	L
18	6	L
14	6.40	L

Here k = 5 and L > M. So, timothy's t-shirt size is L.

Answer to the question no 2

ID: 18-38027-2

So age=38 and loan = 88027

E.D. (x,1) = $\sqrt{(38-25)2 + (88027-40000)2}$ = 48027

E.D. (x,2) = $\sqrt{(38-35)2 + (88027-60000)2}$ = 28027

E.D. (x,3) = $\sqrt{(38-45)2 + (88027-80000)2}$ = 8027

E.D. (x,4) = $\sqrt{(38-20)2 + (88027-25000)2}$ = 63027

E.D. (x,5) = $\sqrt{(38-35)2 + (88027-115000)2}$ = 26973

E.D. (x,6) = $\sqrt{(38-52)2 + (88027-22000)2}$ = 66027

E.D. (x,7) = $\sqrt{(38-23)2 + (88027-90000)2}$ = 1973.06

E.D. (x,8) = $\sqrt{(38-37)2 + (88027-62000)2}$ = 26027

E.D. (x,9) = $\sqrt{(38-58)2 + (88027-100000)2}$ = 11973.02

E.D. (x,10) = $\sqrt{(38-46)2 + (88027-250000)2}$ = 161973

E.D. (x,11) = $\sqrt{(38-31)2 + (88027-175000)2}$ = 86973

Order:

Row	E. D	Class
7	1973.06	Y
3	8027	N
9	11973.02	Y
8	26027	Y
5	26973	N
2	28027	N

Here , k = 5.

And Y > N. So, age 38 loan 88027 will be Y.