```
k<-5
set.seed(1234)
index<-sample(1:2,150,replace=T,prob = c(0.8,0.2))#train0.8 other 0.2 for test
train_data<-iris[index==1,]
test_data<- iris[index==2,]
dis<-matrix(0,ncol=nrow(train_data),nrow=nrow(test_data))
```

remember that if you want to use 2d data ,the fomattion is [1,2] not like c language [1][1]

```
for(i in 1:nrow(dis)){
  for(j in 1:ncol(dis)){
    dis[i,j]<- ((test_data[i,1]-train_data[j,1])^2+(test_data[i,2]-train_data[j,2])^2+(test_data[i,3]-t
  }
  index1<- order(dis[i,])#sort funcion
  try_data<-train_data[index1[1:k],]#
  tab <- table(try_data[,5])
  test_data[i,6]<- which.max(tab)
}
table(test_data[,5],test_data[,6])
```

```
##
##                1  2  3
##    setosa      8  0  0
##    versicolor  0  7  0
##    virginica   0  0 12
```

sort function order()

```
order(dis[1,])
```

```
##   [1]  32   1  15  33   7  17  19  39  42  41  23  11  10  30  36   6  26
##  [18]   3  29  31   9  21  24  18  14  27  20  40  22  25  37   2   5  12
##  [35]  38   4  35  28  16  13   8  34  84  50  79  69  55  70  60  71  76
##  [52]  58  78  85  81  46  82  80  53  52  77  83  73  48  57  64  68  92
##  [69]  65  44  56  75  63  54  51  49  59  47  61 115  74 106 107  43  62
##  [86]  66 123  72 102 112  45  98  87 117  67 121  96  99 122  97 114 120
## [103]  89 108 111 104 116  90  94 109 103 119 118  86  88 105  95  93 113
## [120] 110  91 100 101
```