Q.1 Apply navice bayes algorithm and predict the class for unseen sample. (chills = Yes, runny_nose = No, headache = mild, fever = Yes).

```
> NBdataset<-read.table("fever.csv",header = TRUE,sep = ",")
>
> classifier<-naiveBayes(NBdataset[,1:4],NBdataset[,5])
>
> table(predict(classifier,NBdataset[,5]),NBdataset[,5],
+               dnn= list('predicted','actual'))
         actual
predicted No Yes
      No   5   5
      Yes  0   0
>

> classifier<-naiveBayes(NBdataset[,1:4],NBdataset[,5])
>
> table(predict(classifier,NBdataset[,5]),NBdataset[,5],
+               dnn= list('predicted','actual'))
         actual
predicted No Yes
      No   5   5
      Yes  0   0
>
> classifier$tables
$Chills
              Chills
NBdataset[, 5]  No Yes
           No  0.4 0.6
           Yes 0.6 0.4

$Runny_nose
              Runny_nose
NBdataset[, 5]  No Yes
           No  0.8 0.2
           Yes 0.4 0.6

$Headache
              Headache
NBdataset[, 5] mild  No strong
           No   0.2 0.4    0.4
           Yes  0.4 0.2    0.4

$Fever
              Fever
NBdataset[, 5]  No Yes
           No  0.4 0.6
           Yes 0.4 0.6


>
> NBdataset[15,-5] <- as.factor(c(Chills="Yes",Runny_Nose="No",Headache="mild",Fever="Yes"))
>
> print(NBdataset[15,-5])
   Chills Runny_nose Headache Fever
15    Yes         No     mild   Yes
> result<-predict(classifier,NBdataset[15,-5])
> print(result)
[1] No
Levels: No Yes
>
```