Ⓡ Assingment_1.R* ×

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```r
1   chest=c(rep("gold",20),rep("silver",30),rep("bronze",50))
2   sample(chest,size=10)
3   sample(c("success","failure"),10,replace=T,prob=c(0.9,0.1))
4   |
```

4:1   (Top Level) ⇕   R Script ⇕

Console   **Terminal** ×   **Background Jobs** ×

Ⓡ R 4.2.1 · ~/ ⤳

```
Type 'contributors()' for more information and
'citation()' on how to cite R or R packages in publications.

Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

> source("~/Desktop/Assingment_1.R")
> source("~/Desktop/Assingment_1.R")
>
>
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>
> sample(c("success","failure"),10,replace=T,prob=c(0.9,0.1))
 [1] "success" "success" "success" "success" "success" "success" "success" "success" "success"
[10] "success"
>
```

Assingment_1.R ×

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```r
1 ▾ birth=function(n){
2       return(prob<-1-choose(365,n)*factorial(n)/365^n)
3 ▴ }
4    print(birth(23))
5    N=5000
6    sum=0
7    n=20
8 ▾ for(val in 1:N){
9       a=as.integer(any(duplicated(sample(365,n,replace=TRUE))))
10      sum=sum+a
11 ▴ }
12   prob2=sum/N
13   print(prob2)
```

13:13   (Top Level) ⬍   R Script ⬍

Console   Terminal ×   Background Jobs ×

R R 4.2.1 · ~/ ⇗

```
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> source("~/Desktop/Assingment_1.R")
[1] 0.5072972
[1] 0.418
>
```

Go to file/function   Addins ▾

Source on Save   Run   Source ▾

```r
1  bayesTheorem <- function(pA,pB,pBA)
2  {
3    pAB <- pA * pBA / pB
4    return(pAB)
5  }
6  print(bayesTheorem(0.2,0.4,0.85))
```

6:34   (Top Level) ⇕   R Script ⇕

Console   Terminal ×   Background Jobs ×

R 4.2.1 · ~/

```
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>
> source("~/Desktop/Assingment_1.R")
[1] 0.425
>
```

Go to file/function | Addins

Source on Save | Run | Source

```r
1   data=iris
2   head(data)
3   str(data)
4   range(data$Petal.Length)
5   mean(data$Petal.Length)
6   median(data$Petal.Length)
7   quantile(data$Sepal.Length,0.25)
8   quantile(data$Sepal.Length,0.75)
9   lapply(data[,1:4],sd)
10  summary(data)
11
```

11:1   (Top Level) ⇕   R Script ⇕

Console **Terminal** × **Background Jobs** ×

R 4.2.1 · ~/

```
[1] 0.425
> source("~/Desktop/Assingment_1.R")
'data.frame':   150 obs. of  5 variables:
 $ Sepal.Length: num  5.1 4.9 4.7 4.6 5 5.4 4.6 5 4.4 4.9 ...
 $ Sepal.Width : num  3.5 3 3.2 3.1 3.6 3.9 3.4 3.4 2.9 3.1 ...
 $ Petal.Length: num  1.4 1.4 1.3 1.5 1.4 1.7 1.4 1.5 1.4 1.5 ...
 $ Petal.Width : num  0.2 0.2 0.2 0.2 0.2 0.4 0.3 0.2 0.2 0.1 ...
 $ Species     : Factor w/ 3 levels "setosa","versicolor",..: 1 1 1 1 1 1 1 1 1 1 ...
```

◁▷ | ⤵ | 🖫 | ☐ Source on Save | 🔍 🪄 ▾ | 📋   ⤑ Run | ↻⇥ | ⤑ Source ▾ | ≡

```r
1 ▾ getmode <- function(v){
2       uniqv <- unique(v)
3       print(uniqv[which.max(tabulate(match(v,uniqv)))])
4 ▴ }
5     v=c(2,1,2,3,1,2,3,4,1,5,5,3,2,3)
6     getmode(v)
```

6:11   (Top Level) ⇡   R Script ⇡

Console Terminal × Background Jobs ×   ━ ☐

Ⓡ R 4.2.1 · ~/ ⇗

```
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> source("~/Desktop/Assingment_1.R")
[1] 2
> source("~/Desktop/Assingment_1.R")
[1] 2
> source("~/Desktop/Assingment_1.R")
[1] 2
>
```