```
#1.Initialize a vector as the cost of Shoes
shoes<-20.00
shoes

#2.initialize a vector with mixed datatypes
abc<-c("1","Shoes","2","Dress","3","Grocery")
abc

#3.create a vector of the cost of the different types of dress and gets its
datatype.
dress<-c(1200,750,960,480)
class(dress)

#4.Now change the datatype of the above vector.
as.character(dress)

#5)print the categoires of products available
category=c('Stationary,Grocery,Furniture,Electricals')
category

#6)print the products available in each category
stationary=c('pen,pencil,scale,book,water colour')
stationary
grocery=c('bread,butter,jam,juice,chocolates')
grocery
furniture=c('bed,chair,table,sofa,desk')
furniture
electricals=c('fan','tv','fridge','light','ac')
electricals

#7)print the products available in category 'furnture'?
print(furniture)

#8)programme to create a data frame of furniture with their number of stocls
available
furniture = c('bed','chair','sofa','table','desk')
furniture
stock=c(5,7,8,1,3)
stock
table=data.frame(furniture,stock)
table

#9)programme to check whether the products in category grocery are availble or
not
grocery=c('bread','butter','jam','juice','chocolates')
grocery
avl=c(0,1,1,0,0)
avl_1=factor(avl,labels=c("Yes","No"))
Availablity=avl_1
table2=data.frame(grocery,Availablity)
table2

#10)write code to check whether a particular item is available in a particular
category or not
```

```
x <- list('bread','butter','jam','juice','chocolates')

item <- "jam" #to check whether jam is present in category in grocery

if (item %in% x) {
  print("Item is present in the List.")
} else {
  print("Item is not present in the List.")
}

#11)check whether the stock for a particular product is available or not from
user
#input value 1 or 0 from the user ,1 for available and 0 for not available

a<-1 #for a particular product is available
if (a == 1) {
  print("Product is available")
} else if (a == 0) {
  print("Product is Not available")
}
print("End of program.")

#12)replace the products with the products available to not available
grocery=c('bread','butter','jam','juice','chocolates')
grocery
avl=c(0,1,1,0,0)
avl_1=factor(avl,labels=c("No","Yes"))
Availablity=avl_1
table2=data.frame(grocery,Availablity)
table2

#13)create a matrix dress with 5 rows and 2 columns
dress<-matrix(nrow=5,ncol=2)
dress

#14)get the dimensions of the matrix
attributes(dress)
dim(dress)

#15)create a matrix from already created vector
dim(abc)<-c(3,2)
abc

#16)create a matrix using rbind
x<-1:5
y<-5:9
rbind(x,y)

#17)create a matrix using cbind
cbind(x,y)

#18)create a list of available items onn platform
items<-list("dress","shoes","grocery")
```

items