

R-Markdown_project

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2023-09-08

```
die <- c(1, 2, 3, 4, 5, 6)
die
```

```
## [1] 1 2 3 4 5 6
```

```
is.vector(die)
```

```
## [1] TRUE
```

###creating the deck of cards based on suits in a deck ###Creating a Vector here, I'm using 'c' below in code because it has more than one element

```
deckSuit<-c("Spade","Diamond","Heart","Club")
deckSuit
```

```
## [1] "Spade" "Diamond" "Heart" "Club"
```

```
#deckOfCards
```

```
#hand <- c("ace", "king", "queen", "jack", "ten")
#hand
```

```
#card <- c("ace", "hearts", 1)
#card
```

```
#using color factor, since there will be two colors only in deck of cards
#color <- factor(c("red", "black"))
#color
```

```
deck <- data.frame(
  face = c("king", "queen", "jack", "ten", "nine", "eight", "seven", "six",
    "five", "four", "three", "two", "ace", "king", "queen", "jack", "ten",
    "nine", "eight", "seven", "six", "five", "four", "three", "two", "ace",
    "king", "queen", "jack", "ten", "nine", "eight", "seven", "six", "five",
    "four", "three", "two", "ace", "king", "queen", "jack", "ten", "nine",
    "eight", "seven", "six", "five", "four", "three", "two", "ace"),
  suit = c("spades", "spades", "spades", "spades", "spades", "spades",
    "spades", "spades", "spades", "spades", "spades", "spades", "spades",
    "clubs", "clubs", "clubs", "clubs", "clubs", "clubs", "clubs", "clubs",
    "clubs", "clubs", "clubs", "clubs", "clubs", "clubs", "diamonds", "diamonds",
```

```

        "diamonds", "diamonds", "diamonds", "diamonds", "diamonds", "diamonds",
        "diamonds", "diamonds", "diamonds", "diamonds", "diamonds", "hearts",
        "hearts", "hearts", "hearts", "hearts", "hearts", "hearts", "hearts",
        "hearts", "hearts", "hearts", "hearts", "hearts"),
value = c(13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1, 13, 12, 11, 10, 9, 8,
          7, 6, 5, 4, 3, 2, 1, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1, 13, 12, 11,
          10, 9, 8, 7, 6, 5, 4, 3, 2, 1)
)
color = c("Black", "Red")
deck

```

```

##      face      suit value
## 1   king    spades    13
## 2  queen    spades    12
## 3   jack    spades    11
## 4    ten    spades    10
## 5    nine    spades     9
## 6   eight    spades     8
## 7    seven    spades     7
## 8     six    spades     6
## 9    five    spades     5
## 10   four    spades     4
## 11  three    spades     3
## 12    two    spades     2
## 13   ace     spades     1
## 14  king    clubs    13
## 15 queen    clubs    12
## 16  jack    clubs    11
## 17   ten    clubs    10
## 18   nine    clubs     9
## 19  eight    clubs     8
## 20  seven    clubs     7
## 21    six    clubs     6
## 22   five    clubs     5
## 23   four    clubs     4
## 24  three    clubs     3
## 25    two    clubs     2
## 26   ace     clubs     1
## 27  king  diamonds    13
## 28 queen  diamonds    12
## 29  jack  diamonds    11
## 30   ten  diamonds    10
## 31   nine  diamonds     9
## 32  eight  diamonds     8
## 33  seven  diamonds     7
## 34    six  diamonds     6
## 35   five  diamonds     5
## 36   four  diamonds     4
## 37  three  diamonds     3
## 38    two  diamonds     2
## 39   ace  diamonds     1
## 40  king   hearts    13
## 41 queen   hearts    12
## 42  jack   hearts    11

```

```
## 43 ten hearts 10
## 44 nine hearts 9
## 45 eight hearts 8
## 46 seven hearts 7
## 47 six hearts 6
## 48 five hearts 5
## 49 four hearts 4
## 50 three hearts 3
## 51 two hearts 2
## 52 ace hearts 1
```

```
write.csv(deck, file = "R_Markdown_Project.csv", row.names = FALSE) deck
```

```
#deal(deck)

# Function to deal a card from the deck from first row in a data frame

checkTheDeal <- function(deck) {
  if (nrow(deck) == 0) {
    cat("Deck of cards is empty")
    return(NULL)
  }

  dealingThecard <- deck[1, ]
  return(dealingThecard)
}

# Example: Dealing a card from the deck
dealingThecard <- checkTheDeal(deck)
print(dealingThecard)
```

```
## face suit value
## 1 king spades 13
```

```
deck[1,0]
```

```
## data frame with 0 columns and 1 row
```

```
deck[-(2:52), 1:3]
```

```
## face suit value
## 1 king spades 13
```

```
## face suit value
## king spades 13
```

```
deck2 <- deck
deck2
```

##	face	suit	value
## 1	king	spades	13
## 2	queen	spades	12
## 3	jack	spades	11
## 4	ten	spades	10
## 5	nine	spades	9
## 6	eight	spades	8
## 7	seven	spades	7
## 8	six	spades	6
## 9	five	spades	5
## 10	four	spades	4
## 11	three	spades	3
## 12	two	spades	2
## 13	ace	spades	1
## 14	king	clubs	13
## 15	queen	clubs	12
## 16	jack	clubs	11
## 17	ten	clubs	10
## 18	nine	clubs	9
## 19	eight	clubs	8
## 20	seven	clubs	7
## 21	six	clubs	6
## 22	five	clubs	5
## 23	four	clubs	4
## 24	three	clubs	3
## 25	two	clubs	2
## 26	ace	clubs	1
## 27	king	diamonds	13
## 28	queen	diamonds	12
## 29	jack	diamonds	11
## 30	ten	diamonds	10
## 31	nine	diamonds	9
## 32	eight	diamonds	8
## 33	seven	diamonds	7
## 34	six	diamonds	6
## 35	five	diamonds	5
## 36	four	diamonds	4
## 37	three	diamonds	3
## 38	two	diamonds	2
## 39	ace	diamonds	1
## 40	king	hearts	13
## 41	queen	hearts	12
## 42	jack	hearts	11
## 43	ten	hearts	10
## 44	nine	hearts	9
## 45	eight	hearts	8
## 46	seven	hearts	7
## 47	six	hearts	6
## 48	five	hearts	5
## 49	four	hearts	4
## 50	three	hearts	3
## 51	two	hearts	2
## 52	ace	hearts	1

```
deck2$new <- 1:52
deck2
```

```
##      face      suit value new
## 1   king  spades    13    1
## 2  queen  spades    12    2
## 3   jack  spades    11    3
## 4    ten  spades    10    4
## 5   nine  spades     9    5
## 6  eight  spades     8    6
## 7   seven  spades     7    7
## 8    six  spades     6    8
## 9   five  spades     5    9
## 10  four  spades     4   10
## 11 three  spades     3   11
## 12  two   spades     2   12
## 13 ace    spades     1   13
## 14 king   clubs    13   14
## 15 queen  clubs    12   15
## 16 jack   clubs    11   16
## 17 ten    clubs    10   17
## 18 nine   clubs     9   18
## 19 eight  clubs     8   19
## 20 seven  clubs     7   20
## 21 six    clubs     6   21
## 22 five   clubs     5   22
## 23 four   clubs     4   23
## 24 three  clubs     3   24
## 25 two    clubs     2   25
## 26 ace    clubs     1   26
## 27 king   diamonds  13   27
## 28 queen  diamonds  12   28
## 29 jack   diamonds  11   29
## 30 ten    diamonds  10   30
## 31 nine   diamonds   9   31
## 32 eight  diamonds   8   32
## 33 seven  diamonds   7   33
## 34 six    diamonds   6   34
## 35 five   diamonds   5   35
## 36 four   diamonds   4   36
## 37 three  diamonds   3   37
## 38 two    diamonds   2   38
## 39 ace    diamonds   1   39
## 40 king   hearts    13   40
## 41 queen  hearts    12   41
## 42 jack   hearts    11   42
## 43 ten    hearts    10   43
## 44 nine   hearts     9   44
## 45 eight  hearts     8   45
## 46 seven  hearts     7   46
## 47 six    hearts     6   47
## 48 five   hearts     5   48
## 49 four   hearts     4   49
```

```
## 50 three hearts 3 50
## 51 two hearts 2 51
## 52 ace hearts 1 52
```

```
deck2[c(13, 26, 39, 52), ]
```

```
##      face      suit value new
## 13 ace spades 1 13
## 26 ace clubs 1 26
## 39 ace diamonds 1 39
## 52 ace hearts 1 52
```

```
#facecard <- deck2$face %in% c("king", "queen", "jack")
```