MOOC Course - Introduction to R Software

July 2021

Assignment 5

1. Which one of the following is the correct outcome of the command `print(1/3,digits=5)` ?

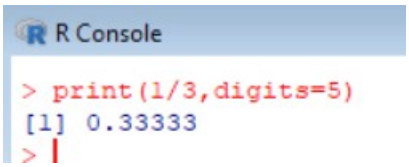
a. `0.3333`

b. `0.333`

c. `0.33333`

d. None of these

Solution:



2. Which one of the following is the correct outcome of the command

`print("My age is", (20+20)/3, "years.", digits=7)`?

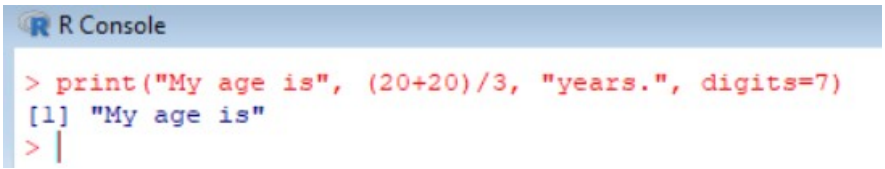
a. `"My age is" 13.3333333 "years."`

b. `My age is (20+20)/3 years.`

c. `"My age is"`

d. `Error`

Solution:



3. Which one of the following is the correct outcome of the command

`print("My college is"); print(20+30); print("years old.")` ?

a. `[1] "My college is" 50 "years old."`

b. `[1] "My college is"`

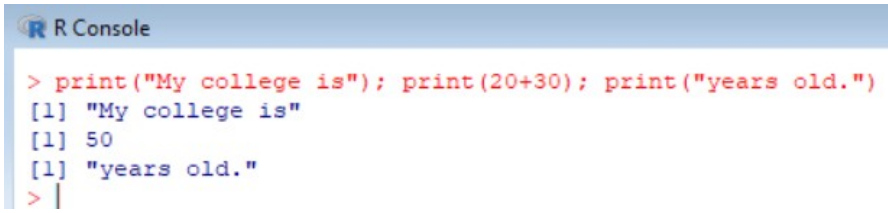
`[1] 50`

`[1] "years old."`

c. `[1] "My college is" 20+30 "years old."`

d. `Error`

Solution:



4. Let `x <- 'Introduction to R Software!\n'` then which one of the following is the correct outcome of the commands `print(x)` and `cat(x)`?

a.

`[1] Introduction to R Software!\n`

and

`[1] Introduction to R Software!\n`

b.

`[1] "Introduction to R Software!"`

and

`Introduction to R Software!\n`

c.

`[1] "Introduction to R Software!"`

and

`Introduction to R Software!\n`

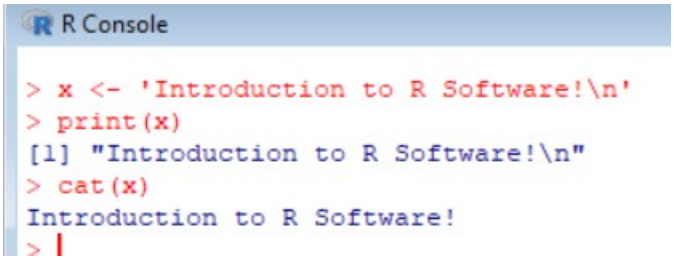
d.

[1] "Introduction to R Software!\n"

and

Introduction to R Software!

Solution:



5. Which one of the following is the correct outcome of the command

print(paste("R Software", 10* 2:4))?

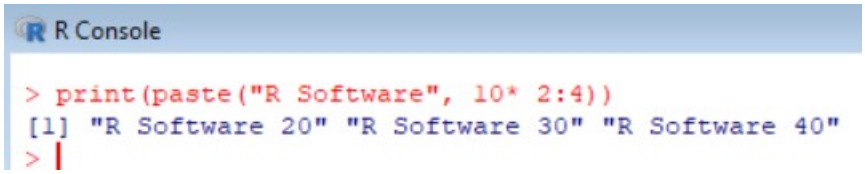
a. **[1] "R Software 10*2" "R Software 10*3" "R Software 10*4"**

b. **[1] "R Software 20" "R Software 30" "R Software 40"**

c. **[1] "R Software 10*2 10*3 10*4"**

d. **[1] R Software 20 R Software 30 R Software 40**

Solution:



6. Which one of the following is the correct outcome of the commands

```
x <- 2
cat("The cube of", "x", "is", x^3, "and the square of x is",
x^2, "!\n") ?
```

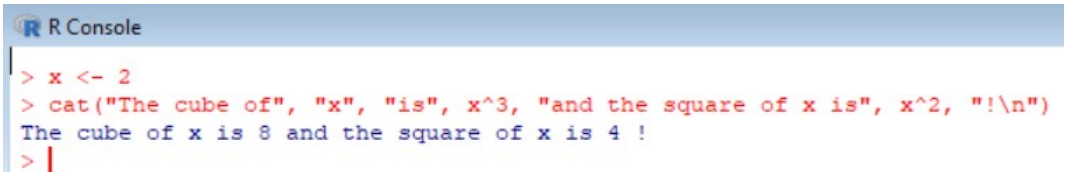
a. `The cube of 2 is 8 and the square of 2 is 4 !`

b. `The cube of x is x^3 and the square of x is x^2 !`

c. `"The cube of" "x" "is" 8 "and the square of x is" 4!\n`

d. `The cube of x is 8 and the square of x is 4 !`

Solution:



7. Which one of the following is the correct outcome of the command

```
cat("The value of 4/3", "is approximately",
format(4/3,digits=3),"\n") ?
```

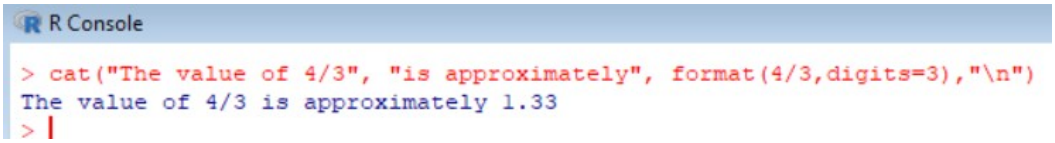
a. `"The value of 4/3 is approximately" 1.33`

b. `The value of 4/3 is approximately 1.333`

c. `The value of 4/3 is approximately 1.33`

d. `"The value of 4/3 is approximately 1.33"`

Solution:



8. Which one of the following is the correct outcome of the command `paste("R Course", "will start from", c("10 Jul 2017", "10 Jul 2018"), collapse=", and ")` ?

a. `[1] "R Course will start from 10 Jul 2017, and  10 Jul 2018"`

b.

`[1] "R Course will start from 10 Jul 2017, and R Course will start from 10 Jul 2018"`

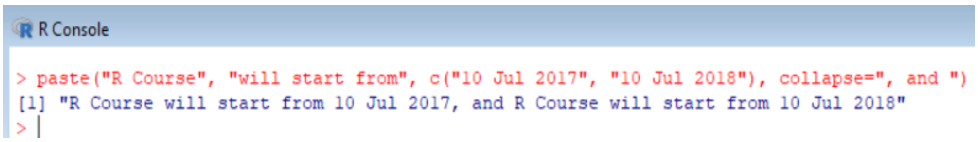
c.

`[1] "R Course will start from 10 Jul 2017, 10 Jul 2018"`

d.

`[1] "R Course will start from" "10 Jul 2017" and "10 Jul 2018"`

Solution:



9. Which one of the following is the correct outcome of the command `paste("Solution of problem", 1:3, sep="*")` ?

a.

`[1] "Solution of problem*1 problem*2 problem*3"`

b.

`[1] "Solution of problem 1 * problem 2 * problem 3"`

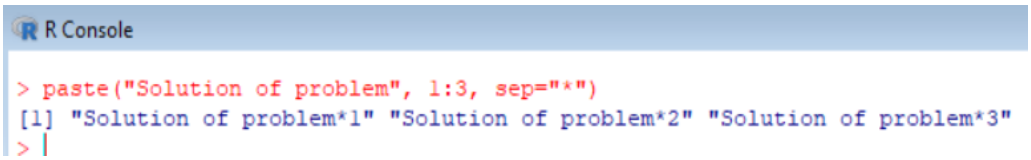
c.

`[1] "Solution of problem*1 and problem*2 and problem*3"`

d.

[1] "Solution of problem*1" "Solution of problem*2" "Solution of problem*3"

Solution:



10. Which one of the following is the correct outcome of the command **paste("Solution of problem", 2:4, sep="+",collapse="")** ?

a.

[1] "Solution of problem+2Solution of problem+3Solution of problem+4"

b.

[1] "Solution of problem 2" + "Solution of problem 3" + "Solution of problem 4"

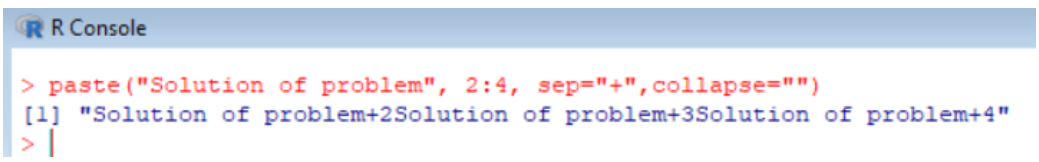
c.

[1] "Solution of problem+2+3+4"

d.

[1] "Solution of problem 2 + Solution of problem 3 + Solution of problem 4"

Solution:



11. Which one of the following is the correct outcome of `y` where

```
y=strsplit("Solution of problem 20-Solution of problem 30-
Solution of problem 40","-")
```

?

a.

```
[[1]]
[1] "Solution of problem 20-30-40"
```

b.

```
[[1]]
[1]
y=strsplit("Solution of problem 20-Solution of problem 30-
Solution of problem 40"
```

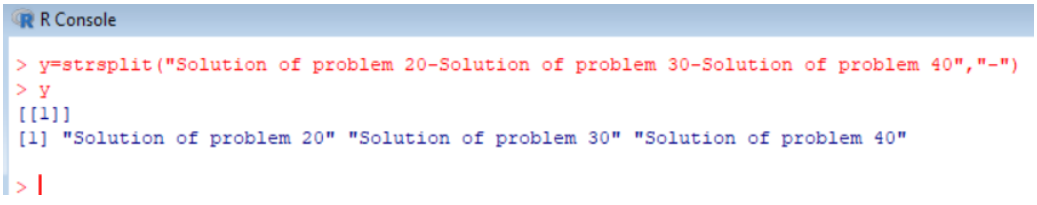
c.

```
[[1]]
[1] "Solution of problem 20" "Solution of problem 30"
"Solution of problem 40"
```

d.

```
[[1]]
[1] "Solution of problem 20"-"Solution of problem
30"-"Solution of problem 40"
```

Solution:



12. Let

```
y=strsplit("Student A gets 20 marks- Student B gets 30 marks- Student C gets 40 marks","-")
```

Which one of the following is the correct command to get the outcome of `y` as `"Student B gets 30 marks"` ?

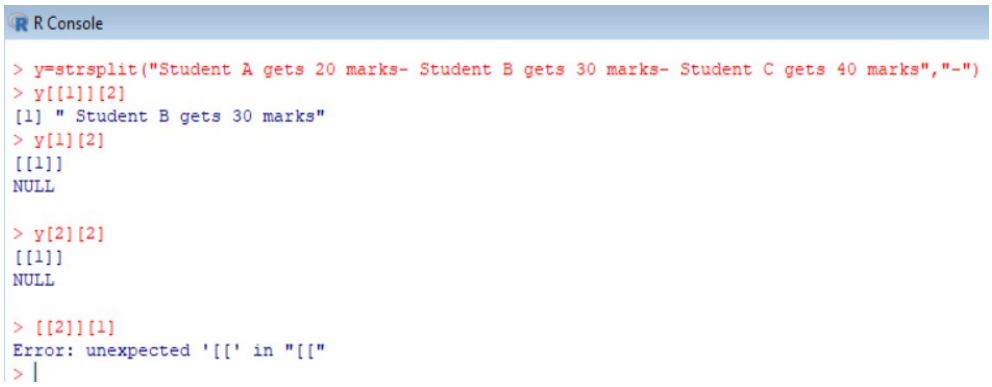
a. `y[1][2]`

b. `y[2][2]`

c. `y[[1]][2]`

d. `[[2]][1]`

Solution:



13. Which one of the following is the correct outcome of the command `nchar("Was Czechoslovakia or Czecho-Slovakia  a sovereign state in Central Europe ?")` ?

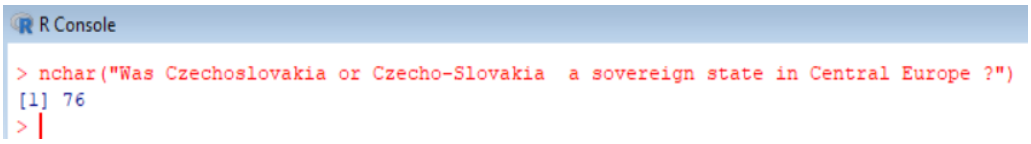
a. `66`

b. `67`

c. `75`

d. `76`

Solution:



14. Which one of the following is the correct outcome of the command `sub("25", "26", "R Course will start from 25 July" )` ?

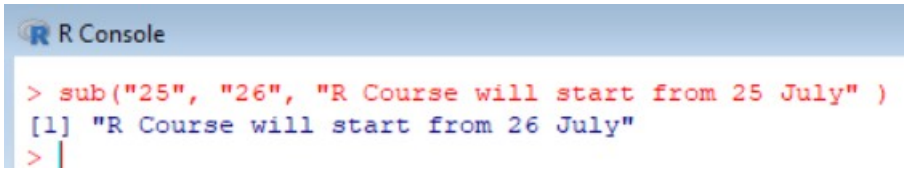
a. `[1] "R Course will start from 25 July"`

b. `[1] "R Course will start from 26 July"`

c. `[1] "R Course will start from 25-26 July"`

d. `[1] "R Course will start from 25,26 July"`

Solution:



15. Which one of the following is the correct outcome of the command `gsub("R Course", "S-plus Course", "R Course - 25 July. R Course - 30 July")`?

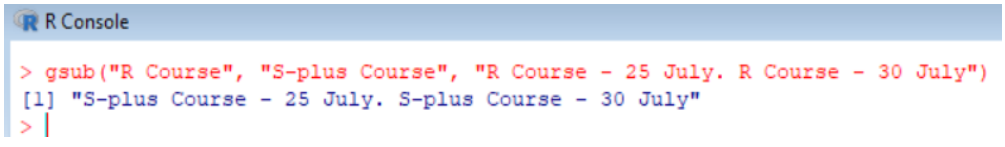
a. `[1] "S-plus Course - 25 July. S-plus Course - 30 July"`

b. `[1] " R Course - 25 July. R Course - 30 July"`

c. `[1] "R Course - 25 July." "S-plus Course - 30 July"`

d. `[1] "S-PLus Course - 25 July." "R Course - 30 July"`

Solution:



16. Which one of the following is the correct outcome of the command `tolower("R CoURse")` ?

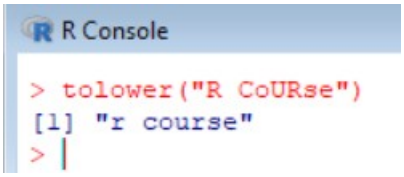
a. `[1] R Course`

b. `[1] "r course"`

c. `[1] R course`

d. `[1] r course`

Solution:



17. Which one of the following is the correct outcome of the command `toupper("R CourSES")` ?

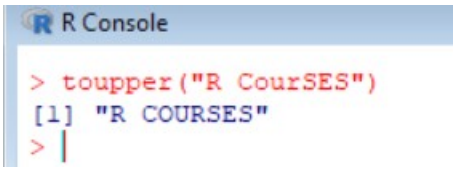
a. `[1] r cOURses`

b. `[1] r courses`

c. `[1] "R COURSES"`

d. `[1] R CourSES`

Solution:



18. Which one of the following is the correct outcome of the command `grep("ab", c("abc", "def", "cbaba", "adaba"))` ?

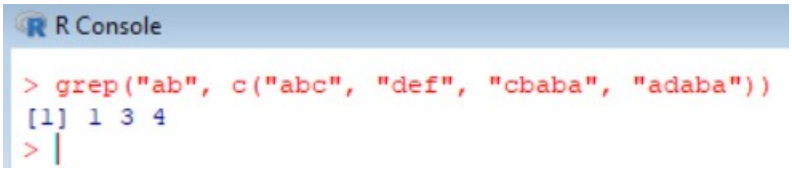
a. `[1] "def"`

b. `[1] "abc", "cbaba", "adaba`

c. `[1] 1 3 4`

d. `[1] 2`

Solution:



19. Which one of the following is the correct outcome of the command `grep("[a-d]", letters)` ?

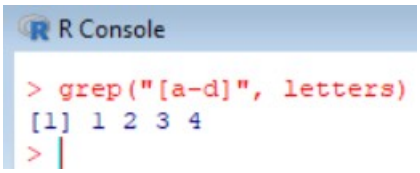
a. `[1] a-d`

b. `[1] a b c d`

c. `[1] a-b-c-d`

d. `[1] 1 2 3 4`

Solution:



20. Which one of the following are the correct outcomes of the commands

`eval(344+465-697-1660+2898-1278)` and

`eval("344+465-697-1660+2898-1278")` ?

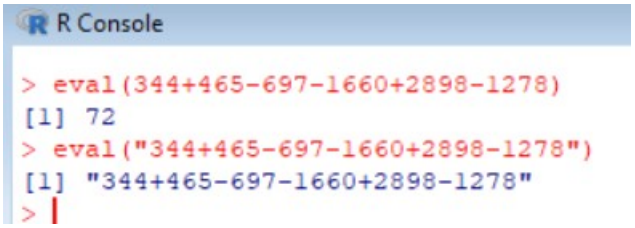
a. `72` and `"344+465-697-1660+2898-1278"` respectively.

b. `344+465-697-1660+2898-1278` and `"72"` respectively.

c. `72` and `344+465-697-1660+2898-1278` respectively.

d. `72` and `"72"` respectively.

Solution:



MOOC Course - Introduction to R Software

Answers of Assignment 5

1. c

2. a

3. b

4. d

5. b

6. d

7. c

8. b

9. d

10 a

11. c

12. c

13. d

14. b

15. a

16. b

17. c

18. c

19. d

20. a