Unit 5 - Week 4 - Data management with repeats, sorting, ordering, and lists

Assignment 4

1) Which one of the following is the correct outcome of the command `sort(c(20,50, 10, 30, 90,70, 80), decreasing = FALSE)`? *1 point*

- `1 2 3 5 7 8 9`
- `9 8 7 5 3 2 1`
- `10 20 30 50 70 80 90`
- `90 80 70 50 30 20 10`

Accepted Answers:
10 20 30 50 70 80 90

2) Which one of the following is the correct outcome of the command `sort (c(20,50, 10, 30, 90,70, 80), increasing = TRUE)?` *1 point*

- `10 20 30 50 70 80 90`
- `90 80 70 50 30 20 10`
- `1 2 3 5 7 8 9`
- Error...

Accepted Answers:
Error...

3) Which one of the following is the correct outcome of the command `order(c(20,50, 10, 30, 90,70, 80), decreasing = FALSE)`? *1 point*

- `1 2 3 4 5 6 7`
- `1 4 3 2 5 7 6`
- `3 1 4 2 6 7 5`
- `3 1 4 5 7 6 2`

Accepted Answers:
3 1 4 2 6 7 5

4) Which one of the following is the correct outcome of the command `mode(c(1, 2, "3", 8+9, "7+9", 6.7, 110*45))`? *1 point*

- `character`
- `numeric`
- `list`
- `data frame`

Accepted Answers:
character

5) Which one of the following is the correct outcome of the command `x[[2]]` where `x <-list (c("name1", "name2"), seq(from=5, to=7), rep(8:10, each=2))` ? *1 point*

- `6`
- `99`
- `5 6 7`
- `"name2"`

Accepted Answers:
5 6 7

6) Which one of the following is the correct outcome of the command `x[[2]][2]` where *1 point*

```
x <-list (c("name1", "name2"), seq(from=5, to=7), rep(8:10, each=2))
```

gives an output as

- `5 6 7`
- `6`
- `99`
- `"name2"`

Accepted Answers:
6

7) Which one of the following is the correct outcome of the command `x[2][2]` where *1 point*

```
x <-list (c("name1", "name2"), seq(from=5, to=7), rep(8:10, each=2))
```

?

- `5 6 7`
- `6`
- `99`
- `"NULL"`

Accepted Answers:
"NULL"

8) Which one of the following is the correct outcome of the command `x[[3]]` where *1 point*

```
x <-list (c("name1", "name2"), seq(from=5, to=7), rep(8:10, each=2))
```

?

- `7`
- `8 8 9 9 10 10`
- `8 9 10 8 9 10`
- `10 10 9 9 8 8`

Accepted Answers:
8 8 9 9 10 10

9) Which one of the following is the correct outcome of the command `x[(x>50)]` where *1 point*

```
x <- c(10, 75, 20, 35, 30, 40, 180, 50, 60, 27, 70, 67, 80, 50, 39, 120)
```

?

- `75 180 60 70 67 80 120`
- `10 20 35 30 40 27 39`
- `TRUE`
- `FALSE`

Accepted Answers:
75 180 60 70 67 80 120

10)Which one of the following is the correct outcome of the command `x[(x - 20 > 40)]` where *1 point*

```
x <- c(10, 75, 20, 35, 30, 40, 180, 50, 60, 27, 70, 67, 80, 50, 39, 120)
```

?

- `10 20 35 30 40 50 27 50 39`
- `75 180 70 67 80 120`
- `NULL`
- None of these

Accepted Answers:
75 180 70 67 80 120

11)Which one of the following is the correct outcome of the command `x[(x^2 + 10 > 50)]` where `x <- c(40, 25, 80, 45, 39, 43, 120, 20, 70, 87, 170, 167, 180, 150, 139, 120)`? *1 point*

- `80 45 43 120 70 87 170 167 180 150 139 120`
- `75 180 70 67 80 120`
- `40 25 80 45 39 43 120 20 70 87 170 167 180 150 139 120`
- `80 120 70 87 170 167 180 150 139 120`

Accepted Answers:
40 25 80 45 39 43 120 20 70 87 170 167 180 150 139 120

12)If `y <- 10:20` then which one of the following is the correct outcome of the command `y[ - (1:9)]`? *1 point*

- `-19 -20`
- `19 20`
- `10 11 12 13 14 15 16 17 18`
- `-10 -11 -12 -13 -14 -15 -16 -17 -18`

Accepted Answers:
19 20

13)Consider the list `z <- list(x1 = "name1", x2 = 10:15)`. Which of the following is the correct command to change the element `x2` by `y2`? *1 point*

- `names(z)[2]= y2`
- `names(z)[2]= "y2"`
- `change.names(z)[2]= "y2"`
- `name.change(z)[2]= "y2"`

Accepted Answers:
names(z)[2]= "y2"

14)Consider the list `z <-list(x1 = "name1", x2 = 10:15)`. Which one of the following is the correct outcome of the command `z["x2"]` ? *1 point*

- `[1] "name1"`
- `[1] "10:15"`
- `[1] 15 14 13 12 11 10`
- `[1] 10 11 12 13 14 15`

Accepted Answers:
[1] 10 11 12 13 14 15

15)Which one of the following is the correct outcome of the command `factor(c(1,1,2,2,3,3))`? *1 point*

- `[1] 1 1 2 2 3 3`
  `Levels: 1 2 3`
- `[1] 1 2 3`
  `Levels: 1 2 3`
- `[1] 1 2 3`
  `Levels: 1 1 2 2 3 3`
- None

Accepted Answers:
[1] 1 1 2 2 3 3
Levels: 1 2 3

16)Which one of the following is the correct outcome of the following commands? *1 point*

```
data = c(1,1,2,2,3,3)
factor(data)
levels(data) = c('I','II','III')
data
```

- `[1] 1 1 2 2 3 3`
  `attr(,"levels")`
  `[1] "I" "II" "III"`

```
[1] 1 2 3
attr(,"levels")
[1] "I"   "II"  "III"
```

```
[1] I I II II III III
Levels: 1 2 3
```

None of these

Accepted Answers:

```
[1] 1 1 2 2 3 3
attr(,"levels")
[1] "I"   "II"  "III"
```

17)Which one of the following is the correct outcome of the command `x=factor(c(1,2,2,5,1,2,1,5),levels=c(1,2,5),ordered=TRUE)`? *1 point*

```
[1] 1 < 2 < 5
Levels: 1 2 2 5 1 2 1 5
```

```
[1] 1  2  5
Levels: 1 2 2 5 1 2 1 5
```

```
[1] 1 2 2 5 1 2 1 5
Levels: 1 < 2 < 5
```

None of these

Accepted Answers:

```
[1] 1 2 2 5 1 2 1 5
Levels: 1 < 2 < 5
```

18)Which one is the correct outcome of the command `factor( c(rep("male",2), rep("female", 3)))`? *1 point*

```
[1] female   female   female male male
Levels: female male
```

```
[1] female   female   male male male
Levels: female male
```

```
[1] male   male   male female female
Levels: female male
```

```
[1] male   male   female female female
Levels: female male
```

Accepted Answers:

```
[1] male   male   female female female
Levels: female male
```

19)Which one of the following is the correct outcome of the command *1 point*

```
unclass(factor(c("lemonade","juice","water","juice","lemonade"),levels=c("juice","lemonade","wate
```

```
[1] 2 1 3 1 2
attr(,"levels")
[1] "juice"    "lemonade" "water"
```

```
[1] 2 3 1 3 2
attr(,"levels")
[1] "juice"    "lemonade" "water"
```

```
[1] 2 1 3 1 2
attr(,"levels")
[1] " lemonade"  "juice"  "water"
```

```
[1] 1 3 2 3 1
attr(,"levels")
[1] " lemonade"  "juice"  "water"
```

Accepted Answers:

```
[1] 2 1 3 1 2
attr(,"levels")
[1] "juice"    "lemonade" "water"
```

20)Which one of the following is the correct outcome of the command `as.factor(c(1, 2, 2, 3, 3, 3))`? *1 point*

```
[1] 1 2 3
Levels: 1 2 3
[1] 3 2 2 1 1 1
Levels: 1 2 3
[1] 1 2 2 3 3 3
Levels: 1 2 3
[1] 1 2 2 3 3 3
Levels: 3 2 1
```

Accepted Answers:

```
[1] 1 2 2 3 3 3
Levels: 1 2 3
```