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Part 1

	Available	Marks
Create a vector *v1* that contains the values 1 to 12.	2	2
Add the values 13 to 16 to the end of *v1*.	2	1
Using *v1*, create a new vector *v2* that contains the 1st to 7th and 12th to 16th elements of *v1*.	3	1
Calculate *v1+v2* and display the results. This will generate a warning; in your comments, explain how R adds two vectors of different lengths.	4	4
Create a new vector *v3* by selecting all even elements of *v1* using a filter.	2	1
Create a matrix *m1* with 4 rows from vector *v1*.	3	2
Create a matrix *m2* with 3 columns from vector *v2*.	3	2
Create and display a new matrix *m3* from *m1* and *m2* where *m3* contains all of the columns of both source matrices.	4	2
Label the columns of m3 as “a”, “b”, “c”, “d”, “e”, “f” and “g”.	2	0
Remove row 3 from *m3*.	3	0
Calculate and display the means of each column.	4	0
Create a barplot of row 1 of *m3*.	3	0
Commenting and use of white space	5	4

Comments

Good use of comments and white space.

You don’t need the final term to add to the end of v1; v1<-c(v1,13,14,15,16) will work.

V2 should be created from v1, not just built from scratch. v2<-c(v1[1:7],v1[12:16])

You can use is.even() in certain places, but the best way to do this is with a filter. Your filter would work without the is.even() bit.

You’ve created the matrices m1 and m2 successfully, but these should have been created from v1 and v2, not just using the same numbers, e.g. m1<-matrix(v1, nrow=4)

To add columns to a matrix use cbind(), rather than rbind(), which adds rows.

Part 2

	Available	Marks
Generate wondrous numbers	25	1
Fibonacci numbers and integer square roots	6	4
Creating and displaying an appropriate data frame	14	0
Updating the data frame	10	0
Commenting and use of white space	5	3

Comments
Good commenting and use of white space, but make sure that your comments refer to the right piece of code.
The Fibonacci sequence is correctly calculated.

0 – Nothing submitted
3 – Major errors and no comments
4 – Minor errors, code does not work
5 – Code works, no comments
6 – Code works, minor comments
7 – Code works, good comments
8+ – Elegant code, fully commented and explained