Ten Simple Rules for Reproducible Computational Research (Summary)

1: Rule number one is about to share a detail about your research when you have produced a result from your research. There should be a proper documentation in which each and every step should be described including the tool used for coding, the version number of program, parameters and also input because when anybody needs to perform the same experiment he can easily get the detail about each and everything so this rule is relevant to documentation.

2: In second rule it is mentioned that data should be manipulated by some program or tool. Manual data manipulation is not good practice. So this point is more relevant to data.

3: The rule number three is about to mentioned the exact version number of program you used for producing the result. Sometimes it makes problem if the exact version number of a program is not mentioned. This rule is relevant to documentation.

4: The rule number four is about the code sometimes minor change in code can cause the problem. Sometimes we write a code in pieces so there should be a version number for each code so that we can identify on which state we wrote which code. This rule is about the code.

5: Rule number 5 is about the data when we produce results from final data or input there are always some intermediate data. The author said keep the record of intermediate data sometimes it is difficult to produce result from final data or there is need to change the programs or parameter for getting to result so there should be a record of intermediate data. This rule is about data.

6: In rule number six it is discussed that sometime we can't get the exact same output from same input but it will be approximately same output. So there is need to give different input for getting the output. By giving the different output we can find the reason that why got approximately same output instead of exact same output. So this rule is relevant to data.

7: The rule number seven is about data there should be a raw data when we produce a graph. Because if anyone needs to reproduce a graph with some changes. First he has to redo the graph to get the data for change which is difficult. This point is about data.

8: The rule number eight is about the documentation and data. There should be a detailed about each result. There is an example of graph in this rule in which they told that there should be detailed about this graph in form of data.

9: The rule number nine described that there should be detailed about result in form text or some other way which is connected to your results. When someone wants to know about your result there should be a detailed given which is connected to your result. This rule is relevant to documentation.

10: The rule number ten is about distribution. You should provide each and everything about your research to public. If anyone wants to access anything he can easily get that thing like parameters, version number etc.