



Q21

a) 12 weeks structured approach  $P_d = 2x$

stages	0	1	2	3	4	5	6	7	8	9	10	11	12
Define	/ / / / /												
Plan & Design			/ / / / /										
Build						/ / / / /							
Check								/ / / / /					
Maintain											/ / / / /		

b) Data dictionaries hold information about variables, such as name, type, and size. The programmers will be able to quickly associate themselves with the code, and the logic, by using the data dictionaries - without having to find out for themselves what each variable <sup>is, \* and its function.</sup> ~~does~~.

Test data is data that has been used to check the logic and efficiency of the code, with expected and returned output. By using the original test data, the programmers ~~will~~, upon modification, will be able to see if what they have modified has worked, by using the returned output of the original data, and the returned output of the modified ~~data~~ code.

c)

i)	total	gst_total	Transaction.amout	Transaction.gst	sendiel
	0	0	22	2	-
	22	2	33	3	-
	55	5	11	1	-
<del>66</del>	66	6	222	0	222

Print Total = 66      Gst\_total = 6

ii) line

2    Avg = 0  
3    Count = 0

(This assumes these lines  
can be inserted without  
interfering with other lines)

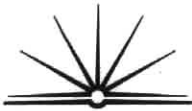
~~7~~    count = count + 1

12    Avg = total / count

13    OUTPUT Avg

d) i) This CASE tool allows the software developer to version the software without the need to count the lines, or manually document new versions and lines of code. It's use is justified because of its automated process.

ii) →



ii) BEGIN VersionStore

Results as an array

Read version

For i goes from 1 to eof

For j goes from 1 to eof

IF version [j].lines > 11000

THEN Results [i] = version [j].version

ENDIF

Next j

Next i

END VersionStore