# COMPUTER PROGRAMMING REPORT

### A)Pseudocode

- 1. Import "random" module
- 2. Import "modul" I have created
- 3. Print "WELCOME TO MY NUMBER GUESSING GAME"
- 4. Print "Which number range would you like to play?\n(From 1 to ?)"
- 5. Print "If you don't enter a number .Range will be 100"
- 6. Define rangeNumber with input.Order to enter a number.
- 7. Print "How do you want to play?"
- 8. Define playerNumber with input.Ask 2 player or 3 player.
- 9. If playerNumber is 2 run the "game()" function inside the module . rangeNumber must be inside of the function.
- 10. Or playerNumber is 3 run the "game3()" function inside the module . rangeNumber must be inside of the function.
- 11. Create a module
- 12. Import "random" module
- 13. Define a function for 2 player "game()". There are rangeNumber(equal to 100 by default), guess(equal to 0 by default), repsCounter1(equal to 0 by default), repsCounter2(equal to 0 by default), winPoint1(equal to 0 by default), winPoint2(equal to 0 by default), againChoice1(equal to "yes" by default), againChoice2(equal to "yes" by default), gameCounter(equal to 0 by default) in the function.
- 14. While againChoice1 and againChoice2 is "yes"
- 15. repsCounter1 equal to zero
- 16. repsCounter2 equal to zero
- 17. Define "number" with "randint()" function from random module.
- 18. While number is not equal to guess
- 19. Define guess with int(input()) functions and order to enter a number.
- 20. Add one point to repsCounter1 for counting.
- 21. If guess equal to number
- 22. Print "Hit!"
- 23. If guess is smaller than number
- 24. Print "Your guess is too low"
- 25. If guess is greater than number
- 26. Print "Your guess is too high"
- 27. Define "number" with "randint()" function from random module.
- 28. While number is not equal to guess
- 29. Define guess with int(input()) functions and order to enter a number.
- 30. Add one point to repsCounter2 for counting.
- 31. If guess equal to number
- 32. Print "Hit!"
- 33. If guess is smaller than number
- 34. Print "Your guess is too low"
- 35. If guess is greater than number
- 36. Print "Your guess is too high"
- 37. If repsCounter1 smaller than repsCounter2

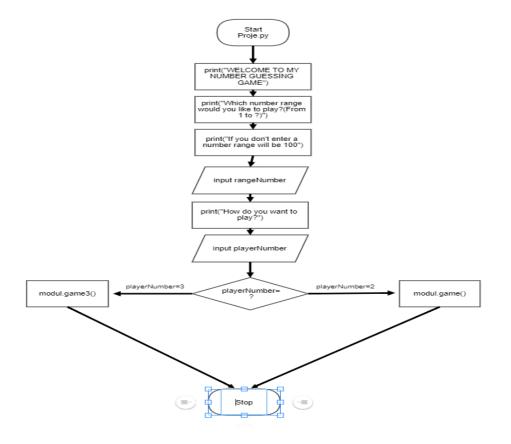
38.	Add a point to winPoint1 to check winner and
39.	Print "Player 1"
40.	If repsCounter2 smaller than repsCounter2
41.	Add a point to winPoint2 to check winner and
42.	Print "Player 2"
43.	If repsCounter 1 equal to repsCounter2
44.	Print "Guys I am sorry but no point"
45.	Add a point to gameCounter to count number of games
46.	Take two input as againChoice1 and againChoice2 for checking to keep playing
	or stop
47.	If againChoice1 or agaionChoice2 are not yes
48.	If gameCounter smaller than 5
49.	Print "Player 1 – Player 2 "
50.	
51.	Print the winPoint1 multiplied by 5 and winPoint2 multiplied by 5
52.	
53.	Print "Player 1:Winner"
54.	If winPoint2 greater than winPoint1
55.	Print "Player 2:Winner"
56.	If winPoint1 equal to winPoint2
57.	·
58.	If gameCounter greater than 5 and even number
59.	
60.	
61.	Define "number" with "randint()" function from random module.
62.	· ·
63.	repsCounter2 equal to 0
64.	While number is not equal to guess
65.	Define guess with int(input()) functions and order to enter a
	number.
66.	Add one point to repsCounter1 for counting.
67.	If guess equal to number
68.	Print "Hit!"
69.	If guess is smaller than number
70.	Print "Your guess is too low"
71.	If guess is greater than number
72.	Print "Your guess is too high"
73.	Define "number" with "randint()" function from random module.
74.	While number is not equal to guess
75.	Define guess with int(input()) functions and order to enter a
	number.
76.	Add one point to repsCounter2 for counting.
77.	If guess equal to number
78.	Print "Hit!"
79.	If guess is smaller than number
80.	Print "Your guess is too low"
81.	If guess is greater than number
82.	Print "Your guess is too high"

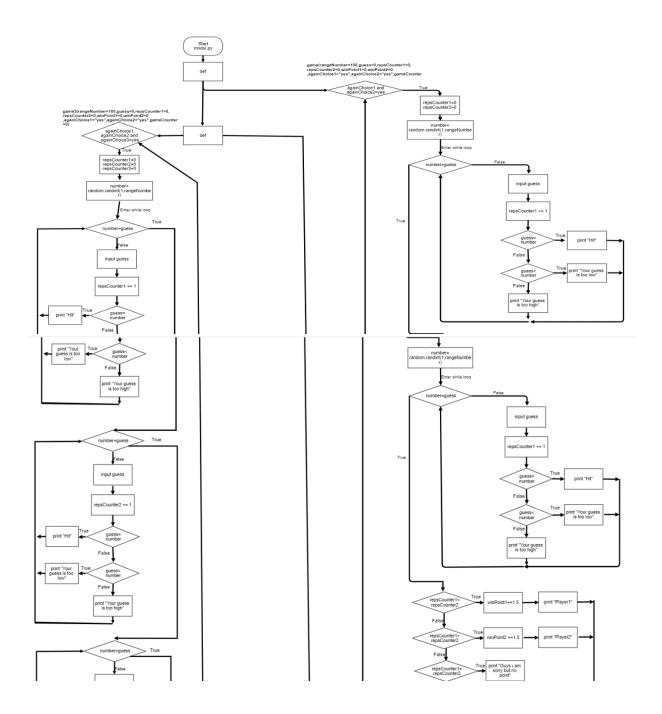
83.	Add a point to gameCounter for counting the game.
84.	If repsCounter1 smaller than repsCounter2
85.	Convert winPoint1 to float with float() function
86.	Add 1.5 point to winPoint1
87.	Print "Player 1"
88.	If repsCounter2 smaller than repsCounter1
89.	Convert winPoint2 to float with float() function
90.	Add 1.5 point to winPoint2
91.	Print "Player 2"
92.	If repsCounter1 equal to repsCounter2
93.	Print "Guys I am sorry but no point"
94.	Print "Player 1 – Player 2 "
95.	Print ""
96.	Print the winPoint1 multiplied by 10 and winPoint2 multiplied by 10
97.	If winPoint1 greater than winPoint2
98.	Print "Player 2:Winner"
99.	If winPoint2 greater than winPoint1
100	). Print "Player 1:Winner"
101	I. If winPoint1 equal to winPoint2
102	2. Print "There is no winner"
103	3. If gameCounter is greater than 5 and odd number
104	Print "Player 1 – Player 2 "
105	5. Print ""
106	6. Print the winPoint1 multiplied by 10 and winPoint2 multiplied by 10
107	
108	3. Print "Player 2:Winner"
109	9. If winPoint2 greater than winPoint1
110	). Print "Player 1:Winner"
111	I. If winPoint1 equal to winPoint2
112	2. Print "There is no winner"
113	3.
114	Define a function for 3 player "game3()".There are rangeNumber(equal to 100 by
	default), guess(equal to 0 by default), repsCounter1(equal to 0 by default),
	repsCounter2(equal to 0 by default), repsCounter3(equal to 0 by
	default), winPoint1(equal to 0 by default), winPoint2(equal to 0 by default),
	winPoint3(equal to 0 by default), againChoice1(equal to "yes" by
	default),againChoice2(equal to "yes" by default), againChoice3(equal to "yes" by default)
	in the function.
115	5. While againChoice1, againChoice2 and againChoice3 are "yes"
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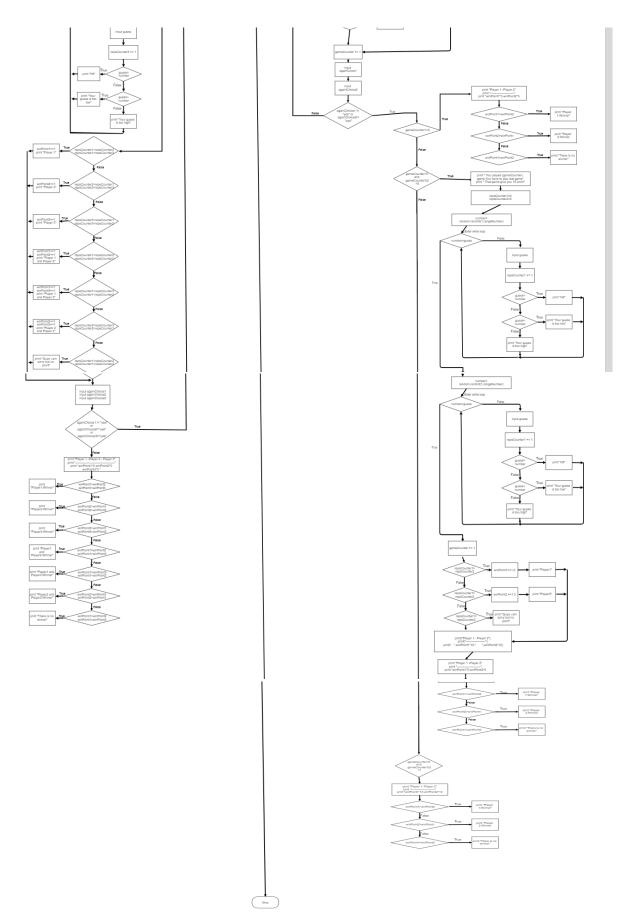
125.	If guess is smaller than number
126.	Print "Your guess is too low"
127.	If guess is greater than number
128.	Print "Your guess is too high"
129.	Define "number" with "randint()" function from random module.
130.	While number is not equal to guess
131.	Define guess with int(input()) functions and order to enter a number
132.	Add one point to repsCounter2 for counting.
133.	If guess equal to number
134.	Print "Hit!"
135.	If guess is smaller than number
136.	Print "Your guess is too low"
137.	If guess is greater than number
138.	Print "Your guess is too high"
139.	Define "number" with "randint()" function from random module.
140.	While number is not equal to guess
141.	Define guess with int(input()) functions and order to enter a number
142.	Add one point to repsCounter3 for counting.
143.	If guess equal to number
144.	Print "Hit!"
145.	If guess is smaller than number
146.	Print "Your guess is too low"
147.	If guess is greater than number
148.	Print "Your guess is too high"
149.	If repsCounter1 smaller than repsCounter2 and repsCounter3
150.	Ad done point to winPoint1
151.	Print "Player1"
152.	If repsCounter2 smaller than repsCounter1 and repsCounter3
153.	Ad done point to winPoint2
154.	Print "Player2"
155.	If repsCounter3 smaller than repsCounter1 and repsCounter2
156.	Add one point to winPoint3
157.	Print "Player3"
158.	If repsCounter1 equal to repsCounter2 and repsCounter1 smaller than
repsCount	
159.	Add one point to winPoint1 and winPoint2
160.	If repsCounter1 equal to repsCounter3 and repsCounter1 smaller than
repsCount	
161.	Add one point to winPoint1 and winPoint3
162.	If repsCounter2 equal to repsCounter3 and repsCounter2 smaller than
repsCount	
163.	Add one point to winPoint2 and winPoint3
164.	
165.	If repsCounter1 ,repsCounter2 and repsCounter3 are same
166.	Print "Guys I am sorry but no point"
167.	Take three input as againChoice1, againChoice2 and againCounter3 for
_	to keep playing or stop
168.	If againChoice1, agaionChoice2 and againChoice3 are not yes

169.	If gameCounter smaller than or equal to 5
170.	Print "Player 1 – Player 2 – Player 3 "
171.	Print ""
172.	Print the winPoint1 multiplied by 5 ,winPoint2 multiplied by 5 and
winPoint3 m	ultiplied by 5
173.	If winPoint1 is greater than winPoint2 and winPoint3
174.	Print "Player 1:Winner"
175.	If winPoint2 is greater than winPoint1 and winPoint3
176.	Print "Player 2:Winner"
177.	If winPoint3 is greater than winPoint1 and winPoint2
178.	Print "Player 2:Winner"
179.	If winPoint1 equal to winPoint2 and winPoint1 is greater than
winPoint3	
180.	Print "Player 1 and Player 2:Winner"
181.	If winPoint1 equal to winPoint3 and winPoint1 is greater than
winPoint2	
182.	Print "Player 1 and Player 3:Winner"
183.	If winPoint2 equal to winPoint3 and winPoint2 is greater than
winPoint1	
184.	Print "Player 2 and Player 3:Winner"
185.	If winPoint1, winPoint2 and winPoint3 are same
186.	Print "There is no winner"

# B)Flow chards







I added the full part to the file

### C)Accomplishments

- 1. I added asking players for number range.
- 2. In addition to the given task, I added a 3-player game feature. When the game starts, a choice of 2 or 3 people is made.
- 3. I wrote most of the code into a module, imported it from the module and used it.
- 4. I completed all taskes. It run succesfully.
- 5. There are 2 different functions and default values of the parameters in the module.
- 6. Unlike the 2 player game in a 3 player game, each game is 5 points. Because this is extra, I did not do it according to the rules of the 2 player game.

#### D)Implementation

- 1. I will explain how to run a game.
- 2. First of all,game asks for the range of numbers. That is extra suggestion.
- 3. Then, it asks 2 player or 3 player.
- 4. We will move to 2 player
- 5. In the written function, the prediction order of the first player and the random number are kept. First player makes a prediction. It gives an output according to the prediction. And the number of reps is kept in memory.
- 6. Second players turn and the random number are kept. Second player makes a prediction. It gives an output according to the prediction. And the number of reps is kept in memory.
- 7. The number of reps is compared. A person with a small number of reps earns 1 point. If the number of reps is equal, no one can score.
- 8. They are asked if they want to play again.
- 9. If both say yes, the game repeats and the score from each game is kept in memory.
- 10. Scoring varies according to the number of games. If less than or equal to 5, each win is 5 points. If the number of games is greater than 5, the last game is played. This game is 15 points.
- 11. The points of the players are calculated by multiplying their points by 5 or 10 and printed
- 12. Which player won or draw in the final will be written on the screen.

## E)Extras

- 1. You can play with 3 players. Every win gives 5 point . You makes choice at the beginning.
- 2. You can choose the range of numbers to guess.