**ASSIGNMENT 2**

**Algorith: -**

1. Create a list of scansion of each word, word\_scansion = [ scansion of each word ]
2. Create a temporary list to store the sum of matras, temp = []
3. Create a list for store the kalas, kala = []
4. Create a Boolean variable, first = false
5. For i in range (0, len(word\_scansion)):
6. If (sum of word\_scansion == 4 and len(temp) == 0):
7. Kala.append(“C”)
8. if (len(kala) == 1)
9. first = true
10. elif (sum of word\_scansion == 4 and len(temp) == 0):
11. Kala.append(“T”)
12. Else:
13. For j in range (len(word\_scansion[i])):
14. Temp.append(word\_scansion[i][j])
15. T\_count = 0
16. If (sum(temp) > 4):
17. Popped = temp.pop()
18. If (sum(temp) == 3 and T\_count <= 2):
19. Kala.append(“T”)
20. T\_count += 1
21. If (T\_count == 2):
22. T­\_count == 0
23. Elif (sum(temp) == 4 and T\_count = 0 ):
24. Kala,append(“C”)
25. Temp.clear()
26. Temp.append(popped)
27. If (sum(temp) == 4):
28. Kala.append(“C”)
29. elif (sum(temp) == 3):
30. kala.append(“T”)
31. elif (sum(temp) == 2):
32. kala.append(“D”)

**Code: -**

**import Matra**

**def chaupaiKala(word\_scansion):**

**temp = [] #for storing the matra**

**kala = [] #for storing the kala value**

**first = False # check if the fisrt kala if 4 and not 3**

**for i in range(0, len(word\_scansion)):**

**if (sum(word\_scansion[i]) == 4 and sum(temp) == 0): # check if the word hase 4 matras**

**kala.append("C")**

**if (len(kala) == 1):**

**first = True**

**elif (sum(word\_scansion[i]) == 3 and sum(temp) == 0 and first == True): #check if word has 3 matras**

**kala.append("T")**

**else:**

**for j in range (0, len(word\_scansion[i])):**

**temp.append(word\_scansion[i][j])**

**T\_count = 0**

**if (sum(temp) > 4):**

**popped = temp.pop()**

**if (sum(temp) == 3 and T\_count <= 2):**

**kala.append("T")**

**T\_count += 1**

**if (T\_count == 2):**

**T\_count = 0**

**elif (sum(temp) == 4 and T\_count == 0):**

**kala.append("C")**

**temp.clear()**

**temp.append(popped)**

**if (sum(temp) == 4):**

**kala.append("C")**

**elif(sum(temp) == 2):**

**kala.append("D")**

**temp.clear()**

**return kala**

**chaupai = ["**छाता छाता कैसा छाता", "बादल जैसा काला छाता", "आरे बादल काले बादल", "गर्मी दूर भगा रे बादल"**]**

**for i in range (4):**

**a = Matra.MatraCount(chaupai[i].split(" "))**

**print(chaupaiKala(a.getWordScansion()))**

**Output: -**

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Description automatically generated**