TSEC

ENGINEERING COLLEGE

EXPERIMENT NO. 6 Aim: write a program to implement code optimiration theories that to adjust to or failt to our. code optimination involves various techiques aimed at improving the efficiency of wode, typically by reducing its eneultion time, memory unage of both. One of the fundamental principles of vode optimication is to maintain the connectness of the program while enhancing it's performance. One commonly weed optimication techique is loop optimication, which tempers woop within a program since wop often represent a significant purbion of execution ionsider une following python code that calculates une sum pfisquaismons il sul qui . det sum- of squarerist): Hotal = 0 sould Bordoum windstindstind har with total fiel num & & zine signing of a connectum to tall and I have a my-Wst - (1, 2, 3, 4, 5) result = 80m_ of squares(my-ust) print (" sum of squares!", result) this ude is stronghthoroughed & norment, mathematical formula for the sum of

squares of vonsecutive numbers:

all to the damp along



rue optimized version of vode wingstris train afainata maine andra anima apprintaga aport our of the collection of the series of the parties 10 000 00 000 m m 10 00 10 0 (20 not1) 1 / 6 pone minima at a manimaga show to colonomy andre my-Wistoro FAR21 33 Mi 50 was versed out mo iniquirecult = usum of garianes (my wist) and grad mars margagnanos: es resultant in this optimized versioners of themps . We elimbated the copp entirely sont · we calculate the length of the list ("n") once. · we use the Romalandinetty houmpute the sum to to sequianess for The optimization inediaces aboth time complexity from (200) -> 100) & space complexity (no need for coop variable De poi lu pa de de de de los estes es estes es estes es estes es estes este e : andonua Williamon to anough?