52 EXPERIMENT 12 DIK SCHEDULINU ALMORITHMS agoritms PCFS, SCAN & CSCAN. STEP 0: START. STEP 1: Declare required variables n- mu of the greene g-anay to hore queue elements 1-loop counter aff- to calculate sek distance MR- stou rotal Nek distance JEP2: Prompt the um so enter the me of aveurana you it in n. Ite 3: Prompt me un to emen the greve elements one by one and stone them away of [1]. STEP 4: Prompt the un to enter me intral head pointion and store it in 907. ITEP 5: Iterate imouan earn queue elment and calculate absolute difference olturen constitutive elements to delermine the reck distance. i) up date total kekdwanie seek' by adding calculated difference. one position to another along with one position to another along with the rek distance for each siep: step 4: Display total reck distance user thaulting entire queue: step 8: Calculate average reck distance by dividing the total reck distance by no. Of elements in queue: STEP 9: Display aurage ille distance STEP 10: END.

SCAN ALMORITHM STEPO: START STEP 1: Declare the variables Maured. à 10 More queue elements: n'- me of greve, i'-loop counter, nek-10 nove total seek distance, 'ur'- avount head poution; preu for premary head pointion, j-loop ounter, m-queue 12e, cyl'- number of younders and low for equation of me current read poulion. STEP 2: Prompt the um so enter the rumber of cylinders and stone it in cyl JEP 3: Prompt um 10 enter queue me ana voice it in variable m redare n=m+1. 1760 9: prompt uner 10 entre queue elements one by one and it one in a [i].

11111154 GEP 5: Prompt um 20 enjer the arrivery read position as well as previous and previous and store it in our and previously:

set 9 [0] = curr. step 6: sort the queue climens rung subble nort Algorithm. ster 7: Display sorted queue elements stel 8. Find location of ament head pourtion in the vorted quere. step 9: Delemine rek distance baced on whether arrient head position is before after premous head pourtion i) If current head pourtion & pillions head powers, men alunce set distance by scanning dowards left and then towards mant 1) If unent herd pourtion 7 premous head portuon, then alculate self distance by scanning towards quant and then towards left in update total rek distance. seek. JEP 10: Display total reek distance reck TEP 11: Auraal seek Dixtame = total kell Distance/No of elements JEP 12: Display Average nik airance STEP 13: END.

CSCAN ALMORITHM OFP O: JIART TEP 1 Dellane variables required. - ancy to you are clements: i- un of avere, kek'- you the total reck autame, it j-loop wunter an - current head polition m- me of avere age- momm of yenders and low for location of wint head pourtion. STEP 2: Prompt the user to enter the rumm of cylindris and note it in cyl' ITEP 3: Display the range of younders from 0 10 cyl-1 STEP 4: Prompt the num 10 enter the greve ne and you it in m. update n=m+1 greve elements one by one and you men in anay q(i). STEP 6: Prompt me um to enten the ement head poweren and you it in an' set q(0) = ans. SIEPT: Prompt me uin la enter me previous nead position and Hore it in pour. one done volling aung Bubble vont

offe 9 suspeny one voren avere elements TEP 10. Find location of current read pourson in vortal aveve. JEP 11. Detumine one seek distance and on whether the current head position is before after previous read pourtioni) of wint head pointion & premon held portion, men alulate the seek distance by scanning towards The left and men rewaiting at me oright end in Ex unent head posteon & previous head position, tren calculate the Kek distance by scanning towards one right and men allarling at me left and in update the total reek distance seek. JEP 12: puplay Total uk Distance Kek JEP 13: Average seek Distance = Total lek Distance/No of Elements+ STEP 14: Display the average rek artani. ITEP 15: END. Exercisent incurrently executed and output obtained.