OPERATING SYSTEM - CS23431

EXP 6(C)

PRIORITY SCHEDULING

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PROGRAM:

#include <stdio.h> int main() { int n; printf("Enter Number of Processes: "); scanf("%d", &n);

int pid[n], b[n], p[n]; for (int i = 0; i < n; i++) {

printf("Enter processid Burst Time and Priority Value for Process %d: ", i + 1); scanf("%d %d %d", &pid[i], &b[i], &p[i]);

}

for (int i = 0; i < n; i++) { int max\_priority = p[i]; int max\_index = i;

int swapped = 0;

for (int j = i + 1; j < n; j++) { if (p[j] < max\_priority) { max\_priority = p[j]; max\_index = j;

swapped = 1;

}

}

if (swapped) { int temp = p[i]; p[i] = p[max\_index];

p[max\_index] = temp;

temp = b[i]; b[i] = b[max\_index]; b[max\_index] = temp;

temp = pid[i]; pid[i] = pid[max\_index];

pid[max\_index] = temp;

}

}

int wait\_time = 0, totalwt = 0, totalturn = 0; printf("P\_ID\tBT\tWT\tTAT\n"); for (int i = 0; i < n; i++) { int tat = wait\_time + b[i];

printf("%d\t%d\t%d\t%d\n", pid[i], b[i], wait\_time, tat); totalwt += wait\_time; totalturn += tat; wait\_time += b[i];

}

printf("Average waiting time is %d\n", totalwt / n);

printf("Average turn around time is %d\n", totalturn / n);

return 0;

}

OUTPUT:

