#include <stdio.h>

int main()

{

int n, i, j, position, temp;

int burst[20], wt[50], tat[50], p[20], total = 0;

float avrg = 0, avrgtt = 0;

printf(" enter total num of process: ");

scanf("%d", &n);

printf("enter process time: \n");

for (i = 0; i < n; i++)

{

printf("p[%d] : ", i + 1);

scanf("%d", &burst[i]);

p[i] = i ;

}

// sort

for (i = 0; i < n; i++)

{

for (j = i + 1; j < n; j++)

{

if (burst[i] > burst[j])

{

temp = burst[i];

burst[i] = burst[j];

burst[j] = temp;

temp = p[i];

p[i] = p[j];

p[j] = temp;

}

}

}

wt[0] = 0;

for (i = 0; i < n; i++)

{

wt[i] = 0;

for (j = 0; j < i; j++)

wt[i] += burst[j];

total += wt[i];

}

avrg = (float)total / n;

printf("\n process \t burst time \t waiting time \t turn time");

for (i = 0; i < n; i++)

{

tat[i] = burst[i] + wt[i];

total += tat[i];

printf("\n p[%d] \t\t[%d] \t\t[%d] \t\t [%d]", p[i]+1, burst[i], wt[i], tat[i]);

}

printf("\n\n avrg waiting time: %.1f", avrg);

}