#include<stdio.h>

#include<math.h>

void main()

{

int min,index,i,j,queue[9]={86,1470,913,1774,948,1509,1022,1750,130},total\_dist=0,head=143;

printf("Cylinder at : 143 \n Total distance travelled : 0 \nPending cylinders : ");

for(i=0;i<9;i++)

{printf("%d ",queue[i]);

}

index=0;

printf("\n ");

for(j=0;j<9;j++)

{

min=5000;

for(i=0;i<9;i++)

{if((abs(min-head)>abs(queue[i]-head))&&queue[i]!=0)

{

min=queue[i];

index=i;

}

}

total\_dist=total\_dist + abs(min-head); //total distance moved by head

queue[index]=0;

head=min;

printf("Current head at %d Total distance moved: %d\n",min,total\_dist);

}

}