/*Mary went to jeweler to get her broken gold chain prepared. For joining any two pieces of chain the jeweler will charge the cost equal to the length of those two pieces . the total cost of repairing the chain will be equl to the sum of cost charged for joining every two pieces.

Write an algorithm for mary to find the minimum cost to join all the pieces of the chain

input
---
the input to the function/method conssit of two arguments
num,an integer representing the number of pieces of the chain
pieces, a list of integers representing the length of each piece of the chain

output
----
return an integer representing the minimum cost of joining all the pieces of the chain
Example
----
input
----

num=4
pieces [4 3 2 6]
output

29
*/

Answer

```
#include "stdio.h"
int minimumCost(int n,int x[]);
main()
{
        int i,n;
        int *x;
        printf("enter length");
        scanf("%d",&n);
        x=(int*)malloc(n*sizeof(int));
        for(i=0;i<n;i++)
                scanf("%d",x+i);
        int k=minimumCost(n,x);
        printf("%d",k);
```

```
}
int minimumCost(int n,int x[])
{
	int i,j,s=0;
	sort(x,n);
	for(i=1;i<n;i++)
	{
		for(j=0;j<=n-i;j++)
		{
			s=s+x[j];
		}
	}
	return s;
}
void sort(int x[],int n)
{
	int i,j,temp;
	for(i=0;i<n;i++)
	{
		for(j=i+1;j<n;j++)
		{
			if(x[i]>x[j])
			{
				temp=x[i];
				x[i]=x[j];
				x[j]=temp;
			}
		}
	}
}
```