

Start here X sum of subsets using backtracking.c X

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1  #include<stdio.h>
2  #include<conio.h>
3  int s[10],x[10],d ;
4  void sumofsub(int ,int ,int);
5  void main(){
6      int n, sum=0;
7      int i;
8      printf("\nEnter the size of the set : ");
9      scanf("%d",&n);
10     printf("\nEnter the set in increasing order:\n");
11     for(i=1; i<=n; i++)
12         scanf("%d",&s[i]);
13     printf("\nEnter the value of d : \n");
14     scanf("%d",&d);
15     for(i=1; i<=n; i++)
16         sum=sum+s[i];
17     if(sum<d||s[1]>d)
18         printf("\nNo subset possible : ") ;
19     else
20         sumofsub(0, 1, sum);
21     getch();
22 }
23 void sumofsub(int m, int k, int r){
24     int i=1;
25     x[k]=1;
26     if((m+s[k])==d){
27         printf("Subset:");
28         for(i=1; i<=k; i++)
29             if(x[i]==1)
30                 printf("\t%d", s[i]);
31         printf("\n");
32     }
33     else
34         if(m+s[k]+s[k+1]<=d)
35             sumofsub(m+s[k], k+1, r-s[k]);
36     if((m+r-s[k]>=d)&&(m+s[k+1]<=d)){
37         x[k]=0;
38         sumofsub(m, k+1, r-s[k]);
39     }
40 }
41
```

■ "C:\web developement(html.css.js)\sum of subsets using backtracking.exe"

Enter the size of the set : 5

Enter the set in increasing order:

1
2
5
6
8

Enter the value of d :

9

Subset: 1 2 6

Subset: 1 8