



THIRUMALASRI P 2024-CSE ▾

T2

Started on	Saturday, 23 August 2025, 6:46 PM
State	Finished
Completed on	Saturday, 23 August 2025, 6:49 PM
Time taken	3 mins 14 secs
Marks	1.00/1.00
Grade	10.00 out of 10.00 (100%)

Question 1 | Correct | Mark 1.00 out of 1.00

Write a program to take value V and we want to make change for V Rs, and we have infinite supply of each of the denominations in Indian currency, i.e., we have infinite supply of { 1, 2, 5, 10, 20, 50, 100, 500, 1000} valued coins/notes, what is the minimum number of coins and/or notes needed to make the change.

Input Format:

Take an integer from stdin.

Output Format:

print the integer which is change of the number.

Example Input :

64

Output:

4

Explanaton:

We need a 50 Rs note and a 10 Rs note and two 2 rupee coins.

Answer: (penalty regime: 0 %)

```

1  #include <stdio.h>
2
3  int main() {
4      int V;
5      scanf("%d", &V);
6
7      int denominations[] = {1000, 500, 100, 50, 20, 10, 5, 2, 1};
8      int n = 9;
9      int count = 0;
10
11
12
13  for (int i = 0; i < n; i++) {
14      while (V >= denominations[i]) {
15          V -= denominations[i];
16          count++;
17      }
18  }
19
20
21  printf("%d\n", count);
22
23  return 0;
24 }
```

	Input	Expected	Got	
✓	49	5	5	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

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THIRUMALASRI P 2024-CSE ▾

T2

Started on	Sunday, 31 August 2025, 1:30 PM
State	Finished
Completed on	Sunday, 7 September 2025, 10:15 AM
Time taken	6 days 20 hours
Marks	1.00/1.00
Grade	10.00 out of 10.00 (100%)

Question 1 | Correct | Mark 1.00 out of 1.00

Assume you are an awesome parent and want to give your children some cookies. But, you should give each child at most one cookie.

Each child i has a greed factor $g[i]$, which is the minimum size of a cookie that the child will be content with; and each cookie j has a size $s[j]$. If $s[j] \geq g[i]$, we can assign the cookie j to the child i , and the child i will be content. Your goal is to maximize the number of your content children and output the maximum number.

Example 1:**Input:**

```
3
1 2 3
2
1 1
```

Output:

```
1
```

Explanation: You have 3 children and 2 cookies. The greed factors of 3 children are 1, 2, 3.

And even though you have 2 cookies, since their size is both 1, you could only make the child whose greed factor is 1 content.

You need to output 1.

Constraints:

$1 \leq g.length \leq 3 \cdot 10^4$

$0 \leq s.length \leq 3 \cdot 10^4$

$1 \leq g[i], s[j] \leq 2^{31} - 1$

Answer: (penalty regime: 0 %)

```
1  #include<stdio.h>
2  int main(){
3      int a;
4      scanf("%d",&a) ;
5      int ar[a];
6      int g;
7      for(int i=0;i<a;i++){
8          scanf("%d",&g) ;
9          ar[i]=g;
10     }
11     int b;
12     int f=0;
13     scanf("%d", &b);
14     int br[b];
15     int m;
16     for(int i=0;i<b;i++){
17         scanf("%d", &m);
18         br[i]=m;
19     }
20     for(int i=0;i<a;i++){
21         for(int j=0;j<b;j++) {
22             if(br[j]>=ar[i]) {
23                 f=ar[i];}
24         }
25     }
26
27     printf("%d",f);
28 }
29
```

	Input	Expected	Got	
✓	2	2	2	✓
	1 2			
	3			
	1 2 3			

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

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THIRUMALASRI P 2024-CSE ▾

T2**Started on** Saturday, 18 October 2025, 8:02 AM**State** Finished**Completed on** Saturday, 18 October 2025, 8:07 AM**Time taken** 4 mins 18 secs**Marks** 1.00/1.00**Grade** **10.00** out of 10.00 (**100%**)

Question 1 | Correct | Mark 1.00 out of 1.00

Given two strings find the length of the common longest subsequence(need not be contiguous) between the two.

Example:

s1: ggtabe

s2: tgatasb

s1		a	g	g	t	a	b
s2		g	x	t	x	a	y b

The length is 4

Solving it using Dynamic Programming

For example:

Input	Result
aab	2
azb	

Answer: (penalty regime: 0 %)

```

1  #include <stdio.h>
2  #include <string.h>
3
4  int main() {
5      char s1[100], s2[100];
6      scanf("%s", s1);
7
8      scanf("%s", s2);
9
10     int m = strlen(s1);
11     int n = strlen(s2);
12     int dp[m + 1][n + 1];
13
14
15     for (int i = 0; i <= m; i++) {
16         for (int j = 0; j <= n; j++) {
17             if (i == 0 || j == 0)
18                 dp[i][j] = 0;
19             else if (s1[i - 1] == s2[j - 1])
20                 dp[i][j] = dp[i - 1][j - 1] + 1;
21             else
22                 dp[i][j] = (dp[i - 1][j] > dp[i][j - 1]) ? dp[i - 1][j] : dp[i][j - 1];
23         }
24     }
25
26     printf("%d\n", dp[m][n]);
27     return 0;
28 }
29

```

	Input	Expected	Got	
✓	aab	2	2	✓
	azb			
✓	ABCD	4	4	✓
	ABCD			

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

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THIRUMALASRI P 2024-CSE ▾

T2**Started on** Sunday, 7 September 2025, 10:18 AM**State** Finished**Completed on** Sunday, 7 September 2025, 10:23 AM**Time taken** 5 mins 52 secs**Marks** 1.00/1.00**Grade** 10.00 out of 10.00 (100%)

Question 1 | Correct Mark 1.00 out of 1.00

Given an array of N integer, we have to maximize the sum of $arr[i] * i$, where i is the index of the element ($i = 0, 1, 2, \dots, N$). Write an algorithm based on Greedy technique with a Complexity $O(n \log n)$.

Input Format:

First line specifies the number of elements- n

The next n lines contain the array elements.

Output Format:

Maximum Array Sum to be printed.

Sample Input:

5

2 5 3 4 0

Sample output:

40

Answer: (penalty regime: 0 %)

```

1  #include <stdio.h>
2
3  int main() {
4      int a;
5      scanf("%d", &a);
6      int ar[a];
7      int p = 0;
8      int e = 0;
9      int r = 0;
10
11     for (int i = 0; i < a; i++) {
12         scanf("%d", &r);
13         ar[i] = r;
14     }
15
16
17     for (int i = 0; i < a - 1; i++) {
18         for (int j = i + 1; j < a; j++) {
19             if (ar[i] > ar[j]) {
20                 int temp = ar[i];
21                 ar[i] = ar[j];
22                 ar[j] = temp;
23             }
24         }
25     }
26
27     for (int i = 0; i < a; i++) {
28         p = ar[i] * i;
29         e += p;
30     }
31
32     printf("%d", e);
33     return 0;
34 }
35

```

	Input	Expected	Got	
✓	5	40	40	✓
	2			
	5			
	3			
	4			
	0			

	Input	Expected	Got	
✓	10 2 2 2 4 4 3 3 5 5 5	191	191	✓
✓	2 45 3	45	45	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

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THIRUMALASRI P 2024-CSE ▾

T2**Started on** Sunday, 7 September 2025, 10:20 AM**State** Finished**Completed on** Sunday, 7 September 2025, 10:25 AM**Time taken** 5 mins 8 secs**Marks** 1.00/1.00**Grade** 10.00 out of 10.00 (100%)

Question 1 | Correct Mark 1.00 out of 1.00

Given two arrays array_One[] and array_Two[] of same size N. We need to first rearrange the arrays such that the sum of the product of pairs(1 element from each) is minimum. That is SUM (A[i] * B[i]) for all i is minimum.

For example:

Input	Result
3	28
1	
2	
3	
4	
5	
6	

Answer: (penalty regime: 0 %)

```

1  #include <stdio.h>
2
3  int main() {
4      int a, s, e, r = 0;
5      scanf("%d", &a);
6      int ar[a], br[a];
7
8
9      for (int i = 0; i < a; i++) {
10         scanf("%d", &s);
11         ar[i] = s;
12     }
13
14
15     for (int j = 0; j < a; j++) {
16         scanf("%d", &e);
17         br[j] = e;
18     }
19
20
21     for (int i = 0; i < a - 1; i++) {
22         for (int j = i + 1; j < a; j++) {
23             if (ar[i] > ar[j]) {
24                 int temp = ar[i];
25                 ar[i] = ar[j];
26                 ar[j] = temp;
27             }
28         }
29     }
30
31
32     for (int i = 0; i < a - 1; i++) {
33         for (int j = i + 1; j < a; j++) {
34             if (br[i] < br[j]) {
35                 int temp = br[i];
36                 br[i] = br[j];
37                 br[j] = temp;
38             }
39         }
40     }
41
42
43     for (int i = 0; i < a; i++) {
44         r += ar[i] * br[i];
45     }
46
47     printf("%d", r);
48     return 0;
49 }
50

```

	Input	Expected	Got	
✓	3 1 2 3 4 5 6	28	28	✓
✓	4 7 5 1 2 1 3 4 1	22	22	✓
✓	5 20 10 30 10 40 8 9 4 3 10	590	590	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

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