

Question 1

Correct

The first three terms in an arithmetic progression are passed as input. A positive integer value N (where $N > 3$) is also passed as the input. The program must print Nth term in the arithmetic progression.

Input Format:

The first line will contain the first three terms separated by a space.

The second line will contain N.

Output Format:

The integer value denoting the Nth term.

Example Input/Output 1:

Input:

5 10 15

6

Output:

30

Explanation:

The progression is 5 10 15 20 25 30 35 and so on.

The 6th term is 30.

Example Input/Output 2:

Input:

1 4 7

5

Output:

13

For example:

Input	Result
5 10 15	30
6	
1 4 7	13
5	

Answer: (penalty regime: 0 %)

```

1 #include<stdio.h>
2 int main(){
3     int a1,a2,a3,n;
4     int d,nthterm;
5     scanf("%d %d %d", &a1, &a2, &a3);
6     scanf("%d", &n);
7     d = a2-a1;
8     nthterm = a1+(n-1)*d;
9     printf("%d",nthterm);
10    return 0;
11 }
```

	Input	Expected	Got	
✓	5 10 15 6	30	30	✓
✓	1 4 7 5	13	13	✓

Passed all tests! ✓

Question 2

Correct

A floating point value F indicating the amount in rupees is passed as input. The program must print the corresponding value in paise.

Note: 1 rupee = 100 paise.

Input Format:

The first line contains F.

Output Format:

The first line contains the integer value denoting the paise.

Boundary Conditions:

$0.00 \leq F \leq 999999.99$

Example Input/Output 1:

Input:

11.30

Output:

1130

Example Input/Output 2:

Input:

0.80

Output:

80

Example Input/Output 3:

Input:

0.0

Output:

0

For example:

Input	Result
11.30	1130
0.80	80
0.0	0

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main() {
3     float rupees;
4     int paise;
5     scanf("%f",&rupees);
6     paise=rupees*100;
7     printf("%d",paise);
8     return 0;
9 }
```

	Input	Expected	Got	
✓	11.30	1130	1130	✓
✓	0.80	80	80	✓
✓	0.0	0	0	✓

Passed all tests! ✓

Question 3

Correct

Alen and Tim both own a tennis grass court and they decide to mow the lawn in and around the court which will cost them Rs.5 per square feet. Given the amount they spent to mow the lawn and the width of the court, find the difference between the length of the courts.

Input Format:

First line will contain the amount spent (in Rs) by Alen and Tim separated by space.

Second line will contain the width (in feet) of the courts of Alen and Tim separated by space.

Output Format:

The value (in feet) which is the difference between the length of the courts rounded off upto two decimal points.

Example Input/Output 1:

Input:

100000 80000

100 80

Output:

0.00

Explanation:

Area of Alen's court = $100000/5 = 20000$ sq.ft. Length = $20000/100 = 200$

Area of Tim's court = $80000/5 = 16000$ sq.ft. Length = $16000/80 = 200$

Hence the difference = $200-200 = 0$ which when rounded off to decimal places is 0.00

Example Input/Output 2:

Input:

17500 40000

50 80

Output:

30.00

Explanation:

Area of Alen's court = $17500/5 = 3500$ sq.ft. Length = $3500/50 = 70$

Area of Tim's court = $40000/5 = 8000$ sq.ft. Length = $8000/80 = 100$

Hence the difference = $100 - 70 = 30.00$

For example:

Input	Result
100000 80000	0.00
100 80	
17500 40000	30.00
50 80	

Answer: (penalty regime: 0 %)

```

1 #include<stdio.h>
2 int main()
3 {
4     float a_spent,t_spent;
5     float a_width,t_width;
6     float a_length,t_length;
7     scanf("%f %f",&a_spent,&t_spent);
8     scanf("%f %f",&a_width,&t_width);
9     a_length = a_spent / (5*a_width);
10    t_length = t_spent / (5*t_width);
11    float diff=a_length-t_length;
12    if(diff<0)
13        diff=-diff;
14    printf("%.2f",diff);
15    return 0;
16 }
```

	Input	Expected	Got	
✓	100000 80000 100 80	0.00	0.00	✓
✓	17500 40000 50 80	30.00	30.00	✓

Passed all tests! ✓

Question 4

Correct

In a zoo there are some birds and animals. All birds have two legs and all animals have four legs.

Given the head count and leg count of both birds and animals taken together, the program must print the head count of birds and animals separated by a space as output.

Input Format:

First line will contain the integer value H representing the head count of both birds and animals taken together.

Second line will contain the integer value L representing the leg count of both birds and animals taken together.

Output Format:

First line will contain the integer values of the head count of birds and animals separated by a space.

Constraints:

$$0 < H < 1000$$

$$1 < L < 2000$$

Sample Input/Output:**Example 1:**

Input:

27

84

Output:

12 15

Explanation:

There are 12 birds and 15 animals.

Example 2:

Input:

114

256

Output:

100 14

For example:

Input	Result
27	12 15
84	
114	100 14
256	

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main() {
3     int H,L;
4     int birds, animals;
5     scanf("%d",&H);
6     scanf("%d",&L);
7     animals=(L-2*H)/2;
8     birds=H-animals;
9     printf("%d %d",birds,animals);
10    return 0;
11 }
12 }
```

	Input	Expected	Got	
✓	27 84	12 15	12 15	✓
✓	114 256	100 14	100 14	✓

Passed all tests! ✓

Question 5

Correct

An integer value N is passed as the input. The program must reverse the sign of N and print -N as the output.

Input Format:

The first line contains N.

Output Format:

The first line contains -N.

Boundary Conditions:

$-999999 \leq N \leq 999999$

Example Input/Output 1:

Input:

125

Output:

-125

Example Input/Output 2:

Input:

-346

Output:

346

Example Input/Output 3:

Input:

0

Output:

0

For example:

Input	Result
125	-125
-346	346
0	0

Answer: (penalty regime: 0 %)

```

1 #include<stdio.h>
2 int main() {
3     int N;
4     scanf("%d", &N);
5     printf("%d", -N);
6     return 0;
7 }
```

	Input	Expected	Got	
✓	125	-125	-125	✓
✓	-346	346	346	✓

	Input	Expected	Got	
✓	0	0	0	✓

Passed all tests! ✓

Question 6

Correct

The program must accept a number N and print the sum of tenth and unit digits.

Input Format:

The first line denotes the value of N.

Output Format:

The first line contains the sum of tenth and unit digits.

Boundary Conditions:

$10 \leq N \leq 9999999$

Example Input/Output 1:

Input:

231

Output:

4

Example Input/Output 2:

Input:

100

Output:

0

Example Input/Output 3:

Input:

192

Output:

11

For example:

Input	Result
231	4
100	0
192	11

Answer: (penalty regime: 0 %)

```

1 #include<stdio.h>
2 int main() {
3     int N,tens,units,sum;
4     scanf("%d",&N);
5     units=N%10;
6     tens=(N/10)%10;
7     sum=tens+units;
8     printf("%d",sum);
9     return 0;
10 }
```

	Input	Expected	Got	
✓	231	4	4	✓
✓	100	0	0	✓
✓	192	11	11	✓

Passed all tests! ✓