

Status	Finished
Started	Monday, 20 October 2025, 7:18 PM
Completed	Monday, 20 October 2025, 7:58 PM
Duration	40 mins 5 secs

Question 1

Correct

Write a program that determines the name of a shape from its number of sides. Read the number of sides as part of a meaningful message. Your program should support shapes with anywhere from 3 up to 6. If a value outside of this range is entered then your program should display an appropriate error message.

Sample Input 1

3

Sample Output 1

Triangle

Sample Input 2

7

Sample Output 2

Heptagon

Sample Input 3

11

Sample Output 3

The number of sides is not supported.

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main ()
3 {
4     int sides;
5     scanf("%d", &sides);
6     switch (sides) {
7         case 3:
8             printf("Triangle\n");
9             break;
10        case 4:
11            printf("Quadrilateral\n");
12            break;
13        case 5:
14            printf("Pentagon\n");
15            break;
16        case 6:
17            printf("Hexagon\n");
18            break;
19        default:
20            printf("The number of sides is not supported.\n");
21    }
22 }
```

	Input	Expected	Got	
✓	3	Triangle	Triangle	✓
✓	7	Heptagon	Heptagon	✓
✓	11	The number of sides is not supported.	The number of sides is not supported.	✓

Passed all tests! ✓

Question 2

Correct

The Chinese zodiac assigns animals to years in a 12-year cycle. One 12-year cycle is shown in the table below, being another year of the Dragon, and 1999 being another year of the Hare.

Year	Animal
2000	Dragon
2001	Snake
2002	Horse
2003	Sheep
2004	Monkey
2005	Rooster
2006	Dog
2007	Pig
2008	Rat
2009	Ox
2010	Tiger
2011	Hare

Write a program that reads a year from the user and displays the animal associated with that year. Your program should accept any year greater than or equal to zero, not just the ones listed in the table.

Sample Input 1

2004

Sample Output 1

Monkey

Sample Input 2

2010

Sample Output 2

Tiger

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main() {
3     int year;
4     scanf("%d", &year);
5     char *zodiac[] = {
```

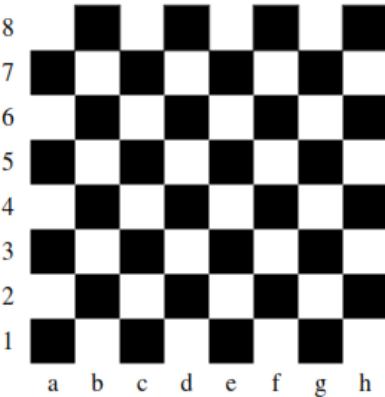
	Input	Expected	Got	
✓	2004	Monkey	Monkey	✓
✓	2010	Tiger	Tiger	✓

Passed all tests! ✓

Question 3

Correct

Positions on a chess board are identified by a letter and a number. The letter identifies the column, while



Write a program that reads a position from the user. Use an if statement to determine if the column begins with a black square. Use modular arithmetic to report the color of the square in that row. For example, if the user enters a1 then the square is black. If the user enters d5 then your program should report that the square is white. Your program must be able to handle any valid input. It does not need to perform any error checking.

Sample Input 1

a 1

Sample Output 1

The square is black.

Sample Input 2

d 5

Sample Output 2

The square is white.

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main() {
3     char column;
4     int row;
5     scanf("%c%d", &column, &row);
6     int colNum = column - 'a' + 1;
7     if ((colNum + row) % 2 == 0) {
```

	Input	Expected	Got	
<input checked="" type="checkbox"/>	a 1	The square is black.	The square is black.	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	d 5	The square is white.	The square is white.	<input checked="" type="checkbox"/>

Passed all tests!