Time taken	1 hour 21 mins
Marks	5.00/5.00
Grade	**100.00** out of 100.00

Input Format:

Integer input from stdin.

Output Format:

return the minimum number of coins required to meet the given target.

Example Input:

16

Output:

4

Explanation:

We need only 4 coins of value 4 each

Example Input:

25

Output:

7

Explanation:

We need 6 coins of 4 value, and 1 coin of 1 value

Answer: (penalty regime: 0 %)

Reset answer

```
def coinChange(target):
    coins = [1, 2, 3, 4]
    count = 0

    while target > 0:
        max2 = max([coin for coin in coins if coin <= target])

        target -= max2
        count += 1

    return count
target=16

```

	Test	Expected	Got	
✓	print(coinChange(16))	4	4	✓

If the number is not valid, it should display "Invalid input".

If it is an automorphic number display "Automorphic" else display "Not Automorphic"

Input Format:

Take a Integer from Stdin Output Format: Print Automorphic if given number is Automorphic number,otherwise Not Automorphic Example input: 5 Output: Automorphic Example input: 25 Output: Automorphic Example input: 7 Output: Not Automorphic

For example:

Test	Result
print(automorphic(5))	Automorphic

Answer: (penalty regime: 0 %)

Reset answer

```
def automorphic(n):
    if n < 0:
        return "Invalid input"

    return "Automorphic" if str(n * n).endswith(str(n)) else "Not Automorphic"

n=5
```

	Test	Expected	Got	
✓	print(automorphic(5))	Automorphic	Automorphic	✓
✓	print(automorphic(7))	Not Automorphic	Not Automorphic	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Take a number in the form of String from stdin.

Output Format:

Print the difference between sum of even and odd digits

Example input:

1453

Output:

1

Explanation:

Here, sum of even digits is 4 + 3 = 7

sum of odd digits is 1 + 5 = 6.

Difference is 1.

Note that we are always taking absolute difference

Answer: (penalty regime: 0 %)

Reset answer

```
def differenceSum(n):
    nu=str(n)
    even = sum(int(nu[i]) for i in range(1, len(str(n)), 2))
    odd = sum(int(nu[i]) for i in range(0, len(str(n)), 2))
    return abs(even - odd)

differenceSum(1453)
```

	Test	Expected	Got	
✓	print(differenceSum(1453))	1	1	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Task:

complete the function which takes a number n as input and checks if it's an ugly number.

return ugly if it is ugly, else return not ugly

Hint:

An ugly number U can be expressed as: U = 2^a * 3^b * 5^c, where a, b and c are nonnegative integers.

For example:

Test	Result
print(checkUgly(6))	ugly
print(checkUgly(21))	not ugly

Answer: (penalty regime: 0 %)

Reset answer

```
def checkUgly(n):
    if n <= 0:
        return "not ugly"
    for prime in [2, 3, 5]:
        while n % prime == 0:
            n //= prime
    return "ugly" if n == 1 else "not ugly"

n=6

```

	Test	Expected	Got	
✓	print(checkUgly(6))	ugly	ugly	✓
✓	print(checkUgly(21))	not ugly	not ugly	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

Write an algorithm to find the discount value for the given total bill amount.

Constraints

1 <= orderValue< 10e100000

Input

The input consists of an integer orderValue, representing the total bill amount.

Output

Print an integer representing the discount value for the given total bill amount.

Example Input

578

Output

12

For example:

Test	Result
print(christmasDiscount(578))	12

Answer: (penalty regime: 0 %)

Reset answer

```
def is_prime(n):
    if n <= 1:
        return False
    if n <= 3:
        return True
    if n % 2 == 0 or n % 3 == 0:
        return False
    i = 5
    while i * i <= n:
        if n % i == 0 or n % (i + 2) == 0:
            return False
        i += 6
    return True

def christmasDiscount(orderValue):
    total_discount = 0
    for digit in str(orderValue):
        if is_prime(int(digit)):
            total_discount += int(digit)
    return total_discount
```

	Test	Expected	Got	
✓	print(christmasDiscount(578))	12	12	✓