My Inspiration
Late. Shivlal Dhamone

Subject Teacher
Santosh Dhamone

Practical No. 6: Application to Coprime Numbers: Practical based on accepting two positive integers and checking whether they are co-prime or not.

Subject Teacher
Santosh Dhamone

Assistant Professor in Mathematics
Art's Commerce and Science College,Onde
Tal:- Vikramgad, Dist:- Palghar

ssdhamone@acscollegeonde.ac.in
www.santoshdhamone.com

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Application to Coprime Numbers :

Description:

Coprime Numbers

Suppose a and b are two positive integers such that they are called co prime numbers if and only if they have 1 as their only common factor and thus HCF(a, b) = 1. In other words, Co-prime numbers are a set of numbers or integers which have only 1 as their common factor i.e. their highest common factor (HCF) will be 1. Co-prime numbers are also known as relatively prime or mutually prime numbers. It is important that there should be two numbers in order to form co-primes.

SANTOSH S DHAMONE
Mathematics Professor
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Possibility Table:

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Code Python

[36]:
```
# Python program to check Co-Prime Number

# Function to check Co-prime
def are_coprime(a,b):

    hcf = 1

    for i in range(1, a+1):
        if a%i==0 and b%i==0:
            hcf = i

    return hcf == 1

# Reading two numbers
first = int(input('Enter first number: '))
second = int(input('Enter second number: '))

if are_coprime(first, second):
    print('%d and %d are CO-PRIME' %(first, second))
else:
    print('%d and %d are NOT CO-PRIME' %(first, second))
```

Application to Coprime Numbers:

OutPut:

```
Enter first number:  2
Enter second number:  3
2 and 3 are CO-PRIME
```

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Python Code:

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Code Python

[38]:
```
# Python program to check Co-Prime Number

# Function to check Co-prime
def are_coprime(a,b):

    hcf = 1

    for i in range(1, a+1):
        if a%i==0 and b%i==0:
            hcf = i

    return hcf == 1

# Reading two numbers
first = int(input('Enter first number: '))
second = int(input('Enter second number: '))

if are_coprime(first, second):
    print('%d and %d are CO-PRIME' %(first, second))
else:
    print('%d and %d are NOT CO-PRIME' %(first, second))
```

```
Enter first number:  3
Enter second number:  144
3 and 144 are NOT CO-PRIME
```

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Python Code:

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Code Python

[40]:
```
# Python program to check Co-Prime Number

# Function to check Co-prime
def are_coprime(a,b):

    hcf = 1

    for i in range(1, a+1):
        if a%i==0 and b%i==0:
            hcf = i

    return hcf == 1

# Reading two numbers
first = int(input('Enter first number: '))
second = int(input('Enter second number: '))

if are_coprime(first, second):
    print('%d and %d are CO-PRIME' %(first, second))
else:
    print('%d and %d are NOT CO-PRIME' %(first, second))
```

```
Enter first number:  179
Enter second number:  2356
179 and 2356 are CO-PRIME
```

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Python Code:

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Code Python

[42]:
```
# Python program to check Co-Prime Number

# Function to check Co-prime
def are_coprime(a,b):

    hcf = 1

    for i in range(1, a+1):
        if a%i==0 and b%i==0:
            hcf = i

    return hcf == 1

# Reading two numbers
first = int(input('Enter first number: '))
second = int(input('Enter second number: '))

if are_coprime(first, second):
    print('%d and %d are CO-PRIME' %(first, second))
else:
    print('%d and %d are NOT CO-PRIME' %(first, second))
```

```
Enter first number:  25
Enter second number:  425
25 and 425 are NOT CO-PRIME
```