Q.1) Write a Python function to check whether a string is a pangram or not.
Note : Pangrams are words or sentences containing every letter of the alphabet at least once.
For example : "The quick brown fox jumps over the lazy dog"

```
import string
def is_panagram(sentence):
    check = set(string.ascii_lowercase)
    senetence = set(sentence.lower())
    return check <= senetence
test = "The quick brown fox jumps over the lazy dog"
print(is_panagram(test))
```

```
D:\User\Desktop\Python\.venv\Scripts\python.exe "D:\User\Desktop\Python\Placement Preparation Test\1.py"
True
```

Q.2) Write a Python program to calculate the sum of the digits in an integer.

```
def add(a,b):
    return a+b
print(add(2,59))
```

```
D:\User\Desktop\Python\.venv\Scripts\python.exe "D:\User\Desktop\Python\Placement Preparation Test\1.py"
61
```

Q.3) Write a Python program to sort three integers without using conditional statements and loops. [u can use built in functions for this]

```
digit = [15,12,10]
print(sorted(digit))
```

```
D:\User\Desktop\Python\.venv\Scripts\python.exe "D:\User\Desktop\Python\Placement Preparation Test\1.py"
[10, 12, 15]
```

Q.4) Write a Python function to check whether a number is perfect or not.
According to Wikipedia : In number theory, a perfect number is a positive integer that is equal to the sum of its proper positive divisors, that is,
the sum of its positive divisors excluding the number itself (also known as its aliquot sum). Equivalently, a perfect number is a number that is half the
sum of all of its positive divisors (including itself).
Example : The first perfect number is 6, because 1, 2, and 3 are its proper positive divisors, and 1 + 2 + 3 = 6.
Equivalently, the number 6 is equal to half the sum of all its positive divisors: (1 + 2 + 3 + 6) / 2 = 6. The next perfect number is 28 = 1 + 2 + 4 + 7 + 14.
This is followed by the perfect numbers 496 and 8128.

```
def is_perfect(n):
    if n <= 0:
        return False
    sum_of_divisors = 0
    for i in range(1, n):
        if n % i == 0:
            sum_of_divisors += i
    return sum_of_divisors == n
a = int(input("Enter a number: "))
print(f"Is {a} a perfect number? {is_perfect(a)}")
```

```
D:\User\Desktop\Python\.venv\Scripts\python.exe "D:\User\Desktop\Python\Placement Preparation Test\1.py"
Enter a number: 8128
Is 8128 a perfect number? True
```