question 2:

Write the python code for reading a real number from the keyboard and for writing that number on the console with two digits of precision in the decinal part. If the conversion from the input to a real number is not possible, the output will be the warning "The input is not a real number".

Write the python code inside the edit-box below


```python
try:
        real = float(input("Introduce a Real Number: "))
        print(f'The Real number inserted is {real:.2f}.')
except:
        print("The input is not a real number")
```


question 3:

Write a python program that reads two integer numbers from the keyboard and shows on the console the greatest common divisor (gcd) of them.

Note: The function gcd is defined in the module math.

Write the python code inside the edit-box below


```python
import math

try:
        num1 = int(input("Introduce Integer Number 1: "))
        num2 = int(input("Introduce Integer Number 2: "))

        print(f'The gcd between {num1} and {num2} is {math.gcd(num1, num2)}.')
except:
        print("The input is not an integer number")
```


question4:

Write the python code associated to the entity Rectangle specified as follows;

```
-------------------------
Rectangle
-------------------------
-- base: float
-- height: float
-------------------------
-- init (base, height)
+ getArea( ): float
+ getPerimeter( ): float
-------------------------
```

using your implementation of the class Rectangle, write in a single file a computer program that reads from the keyboard the base and height of a rectangle, and shows on the console its area and perimeter.

Attach your solution with extension app.txt down here:

```python
def main():
    print("\nArea and Perimeter of a Rectangle\n")

    while(1):
```

```python
        try:
            base = float(input("Insert base:"))
            height = float(input("Insert height:"))
            break
        except:
            print("Imput error, try again\n")

    r = Rectangle(base, height)
    print(r)



class Rectangle:
    def __init__(self, base, height):
        self.__base = base
        self.__height = height

    def __str__(self):
        print(f'\nRectangle base: {self.__base}')
        print(f'Rectangle height: {self.__height}')
        print(f"Rectangle area: {self.getArea():.2f}")
        print(f"Rectangle perimeter: {self.getPerimeter():.2f}")
        return('')

    def getArea(self):
        return (self.__base * self.__height)

    def getPerimeter(self):
        return (2*(self.__base+self.__height))

#Entry point
if __name__ == '__main__':
        main()
```

question 5:

Complete functionality 9 of the menu-driven program that shows on the console statistic values from a series of n integers numbers inserted by the user (template Lab_3.3). The length of the series must be defined by the user and the random integer values generated must be in the in the interval [1-6].

BASIC STATISTICS CALCULATOR:
1.- Insert Series
2.- Minimum
3.- Maximum
4.- Sum
5.- Arithmetic Mean
6.- Standard Deviation
7.- Full Report
8.- Show Series
9.- Generate random series (1-6)

0.- Quit

Attach you solution with extension app.txt down here:

We add to the project Basic Statistics Calculator the function below

```python
def generateRandomSeries():
        global x
        x = []
        series_length = int(input("Length of the series: "))
        for i in range(0,series_length):
                number = random.randint(1,6)
                x.append(number)
        print(x)
```