

Task 1:

Write a Python function to determine whether a given number is prime or not. Your program should have the following features:

- Implement a function called `is_prime(number)` which takes an integer parameter `number` and returns `True` if the number is prime, and `False` otherwise.
- Use an if-else statement inside the `is_prime()` function to check if the given number is divisible by any integer from 2 to the square root of the number.

If it is divisible, return `False`; otherwise, return `True`.

- Implement a loop to repeatedly ask the user to enter a number. Inside the loop, call the `is_prime()` function to determine whether the entered number is prime or not.
- Print an appropriate message indicating whether the number is prime or Not.

Answer:

```
def is_prime(number):
    if number<1:

        return False
    for i in range(2 ,int(number**0.5) +1):
        if number %i ==0:
            return False
    return True
while True:
    try:
        num=int(input("Enter a number(Press 0 to exit)"))
        if num == 0:
            break
        result= " prime" if is_prime(num) else "not a prime"
        print(f" {num} is {result} number")
    except ValueError:
        print("Enter a valid integer")
```