```
number = int(input("enter a number: "))
for max_number in range(1, number):
 if max_number \% 3 == 0 and max_number \% 5 == 0:
   print("fizzbuzz", max_number)
 elif max_number % 3 == 0:
   print("fizz", max_number)
 elif max_number % 5 == 0:
   print("buzz", max_number)
  else:
    print(max_number)
# fibonacci series
def fibonacci(x, y):
 while y <= 100:
   print(y)
   x, y = y, x + y
fibonacci(0, 1)
# program to check if a give number is a power of 2
import math
```

```
def power_of_two(number):
 if not math.log(number, 2).is_integer():
   return False
  else:
   return True
number = int(input("Enter the number: "))
print(power_of_two(number))
# capitalizing first letter of each word in a sentence
message = input("Enter a message: ")
print(message.title())
# reversing an integer
def reverse_integers(number):
 sign = 0
 number_string = str(number)
```

```
new_number = number_string.replace('-', ")
 reversed_num = int(new_number[::-1])
 if number < 0:
   sign = -1
   return reversed_num * sign
 else:
   sign = 1
   return reversed_num * sign
number = int(input("Number: "))
print(reverse_integers(number))
# counting vowels in a sentence
def vowels_count(message):
 vowels_in_message = []
 vowels = "aeiou"
 for char in message.lower():
   if char in vowels and char not in vowels_in_message:
     vowels_in_message.append(char)
 return len(vowels_in_message)
message = input("Enter message: ")
print(vowels_count(message))
```