**POWER OF 2:**

first i have used a for loop starting from 0 to the number entered.

then used a condition if the pow of (2, i) equals the number, then the no is a power of 2 i.e. prints true.

then used a flag value (c = 1) for the next condition so that it doesn't print false after printing true.

**69-PROBLEM:**

First, I have divided the number into its single digits.

then stored them in an array.

then I have changed every digit to 9 to make the number large and then stored the result in another array.

then sorted the largest element among them.

**ARE THERE COMMON FACTORS:**

first i have started a for loop from 1 to the product of two numbers.

then checked the condition if both the numbers have the same factor. if the condition is true then i have used a counter variable c to count the factors.

**NEGATIVE-POSITIVE EXISTENTIAL CRISIS:**

first i have used a for loop from 0 to the array length. Then used a condition, if the number is less than 0 and has a duplicate of it (whether positive or negative) then saved the negative number in an array.

then used a loop to find the smallest negative number. After that stored the largest number in max variable and used a for loop from 0 to the length of the saved array (which has both positive and negative numbers) to check if the corresponding largest number exists.