**FSDS MAY BATCH 2022(Python Programming 3)**

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Q1. Write a Python Program to Check if a Number is Positive, Negative or Zero?

Ans:

number = float(input("Enter a number: "))

if number > 0:

print(number, "is a positive number")

elif number == 0:

print(number, "is zero")

else:

print(number, "is a negative number")

Q2. Write a Python Program to Check if a Number is Odd or Even?

Ans:

number = int(input("Enter a number: "))

if number % 2 == 0:

print(number, "is even")

else:

print(number, "is odd")

Q3. Write a Python Program to Check Leap Year?

Ans:

year = int(input("Enter a year: "))

if year % 4 == 0:

if year % 100 == 0:

if year % 400 == 0:

print(year, "is a leap year")

else:

print(year, "is not a leap year")

else:

print(year, "is a leap year")

else:

print(year, "is not a leap year")

Q4. Write a Python Program to Check Prime Number?

Ans:

number = int(input("Enter a number: "))

if number > 1:

for i in range(2, number):

if (number % i) == 0:

print(number, "is not a prime number")

break

else:

print(number, "is a prime number")

else:

print(number, "is not a prime number")

Q5. Write a Python Program to Print all Prime Numbers in an Interval of 1-10000?

Ans:

lower = 1

upper = 10000

print("Prime numbers between", lower, "and", upper, "are:")

for number in range(lower, upper+1):

if number > 1:

for i in range(2, number):

if (number % i) == 0:

break

else:

print(number)