Python Assignment 1

Question 1

Question

Write a program which will find all such numbers which are divisible by 7 but are not multiple of 5, between 2000 and 3200.

Solution

```
print(*[x for x in range(2000, 3201) if x % 7 == 0 and x % 5 != 0])
```

Output

```
2002 2009 2016 2023 2037 2044 2051 2058 2072 2079 2086 2093 2107 2114 2121 2128 2142 2149 2156 2163 2177 2184 2191 2198 2212 2219 22
```

Question 2

Question

Write a program which can compute the factorial of a given numbers.

Solution

```
 num = int(input("Enter a number : "))
fact = 1
for i in range(num, 0, -1):
    fact = fact * i
print("Factorial =", fact)
```

Output

```
 Enter a number : 5
Factorial = 120
```

Question 3

Question

Write a Python program that prints all the numbers from 0 to 6 except 3 and 6.

Note : Use 'continue' statement.

Solution

```
for i in range(0, 7):
    if i == 3 or i == 6:
        continue
    print(i)
```

Output

```
0
1
2
4
5
```

Question 4

Question

Write a program that accepts a string and calculates number of letters and digit.

Solution

```
phrase = input("Enter phrase : ")
l = d = 0
for c in phrase:
    if c in ascii_letters:
        l += 1
    elif c in digits:
        d += 1
print("Number of letters =", l)
print("Number of digits =", d)
```

Output

```
Enter phrase : hello 123
Number of letters = 5
Number of digits = 3
```