

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 2226 2233 2239 2246 2253 2267 2274 2281 2288 2302 2309 2316 2323 2337 2344 2351 2358 2372 2379 2386 2393 2407 2414 2421 2428 2442 2449 2456 2463 2477 2484 2491 2498 2512 2519 2526 2533 2539 2546 2553 2567 2574 2581 2588 2602 2609 2616 2623 2637 2644 2651 2658 2672 2679 2686 2693 2707 2714 2721 2728 2742 2749 2756 2763 2777 2784 2791 2798 2812 2819 2826 2833 2839 2846 2853 2867 2874 2881 2888 2902 2909 2916 2923 2937 2944 2951 2958 2972 2979 2986 2993 3007 3014 3021 3028 3042 3049 3056 3063 3077 3084 3091 3098 3112 3119 3126 3133 3139 3146 3153 3167 3174 3181 3188 3202
```



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
```