TRAILING DIGITS

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PROBLEM STATEMENT

In a large shipment of doodads given the price of a each doodads(b) in cents and consumers are more likely to purchase goods when most of the trailing digits(d) are same.and we decided to sell doodads in bundle(k) and given the maximum price(a) of a bundle so we have to write a program that optimises the trailing digits

APPROACH

To find out the maximum number of consecutive occurances of d digits for the given price b and given maximum price a where the b does not exceeds the a value for these we considered a large shipment of doodad and made them into the bundles and find the occurances of the d in the last price of the doodads bundle

LEARNINGS

1. Working on gitlab.
2. We learnt how to use latex from the scratch and make presentation out of it.
3. We learned how to extract data from webpages by webscraping.

CHALLENGES

- We face difficulty in understanding the problem statement.
- Difficulty in writing the code.
- Error correction took a lot of time.
- Preparing a Presentation.

STATISTICS

1. Number of lines of code = 33
2. Number of Functions used = 2

DEMO/SCREENSHOTS

main.py

```python
import sys

b = int(sys.argv[1])
d = int(sys.argv[2])
a = int(sys.argv[3])

def maxTrailing(b, d, a):
    # b : price of each doodad in cents
    # d : desired trailing digit
    # a : Maximum price of bundle
    maxMultiplier = int(a / b);
    maxcount = 0
    k = 1
    while (k <= maxMultiplier):
        result = b * k
        if str(d) in str(result):
            count = trailing(d, result)
            if maxcount < count:
                maxcount = count
        k += 1
    return maxcount

def trailing(d, result):
    count = 0
    for i in str(result):
        if i == str(d):
            count +=1
        else:
            count = 0
    return count if count >=2 else 0

max_trailing = maxTrailing(b, d, a)
print("Max trailing count:", max_trailing)

```

DEMO/SCREENSHOTS

main.py

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        result = b * k
        if str(d) in str(result):
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Command line arguments: 57 9 1000

Standard Input: ◉ Interactive Console ○ Text

DEMO/SCREENSHOTS

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```

```
Max trailing count: 2


...Program finished with exit code 0
Press ENTER to exit console.
```