Insect Population Control — T86921_en

Field biologists run a field experiment over n days to assess the population of an invasor insect species.
An insect trap is set on the first day, and a new trap is added every day, so on the ith day, i traps are deployed. Each trap is expected to capture K individuals. However, specimens learn to avoid traps, so the effectiveness of the traps decays with time.
For this, the expected number of captured individuals on the i-th day is:

$$E_i = \frac{K * i}{i!}$$

Thus, the accumulated number of captures after n days of field work will be:

$$C(n) = \sum_{i=1}^{n} \frac{K * i}{i!}$$

Write a function `captures(n,K)` that receives two integers: the number of days of the field experiment (n) and the expected captures per trap (K) and returns the expected accumulated number of captures $C(n)$ at the end of the field experiment.

Observation

- You are not allowed to import any function from `math` module.
- Using lists is not necessary, and will severely penalize your grade.
- Only the function is expected. If you have a main program to test it, comment it out, or put it inside an `if __name__ == "__main__":` conditional.

Problem information

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