



UPPERCASE IS ALL YOU NEED

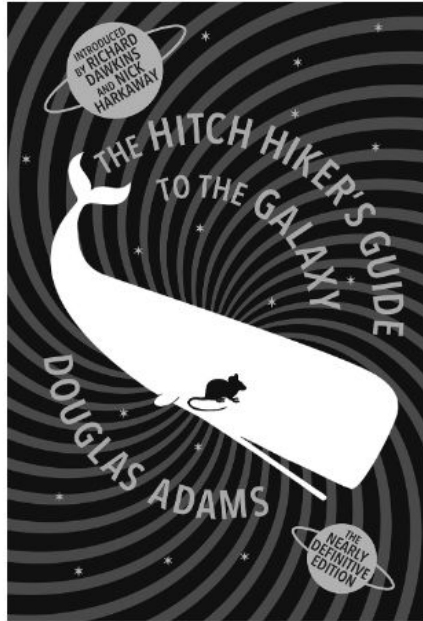
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PROBLEM STATEMENT

HOW DO LLMS UNDERSTAND CASE?

IS THAT AN IMPORTANT COMPONENT OF
PROMPT ENGINEERING?

CASES AND CAPITALIZATION



(I) BOOK COVER



(II) COMIC BOOK

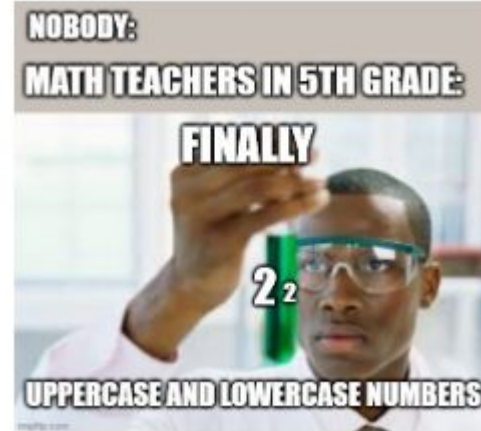


(III) NEWSPAPER

FIGURE 2: UPPERCASE IS WIDELY USED IN CULTURAL CONTEXTS

UPPERCASE AND CULTURE

WHEN CAPS LOCK IS ON AND
YOU HOLD SHIFT ON THE FIRST
LETTER



UPPERCASE AND PROGRAMMING

```
# BURN, BABY, BURN  
BANK      36  
SETLOC    P40S  
BANK  
EBANK=    WHICH  
COUNT*   $$/P40
```

SQL programmers be like



RELATED WORK

- “DOES PROMPT FORMATTING HAVE ANY IMPACT ON LLM PERFORMANCE?,” ARXIV PREPRINT ARXIV:2411.10541, 2024.
- “CAN AI MODELS APPRECIATE DOCUMENT AESTHETICS? AN EXPLORATION OF LEGIBILITY AND LAYOUT QUALITY IN RELATION TO PREDICTION CONFIDENCE,” ARXIV PREPRINT ARXIV:2403.18183, 2024.
- “QUANTIFYING LANGUAGE MODELS’ SENSITIVITY TO SPURIOUS FEATURES IN PROMPT DESIGN OR: HOW I LEARNED TO START WORRYING ABOUT PROMPT FORMATTING,” INTERNATIONAL CONFERENCE ON LEARNING REPRESENTATIONS (ICLR), 2024.

RELATED WORK - CITIZEN SCIENCE

- “PROMPTS ARE CASE SENSITIVE (KINDA COOL).” [REDDIT](#), 2024.
- “IS DALL E 2 - SENSITIVE TO - CASE, PUNCTUATION... ?.” [REDDIT](#), 2022
- “DOES CHATGPT REALIZE WHEN A WORD IS CAPITALIZED FOR EMPHASIS?.” [REDDIT](#), 2023
- “DOES LETTER CASE (ON INPUT) HAVE ANY EFFECT ON CHATGPT.” [REDDIT](#), 2023

- KEY TAKEAWAYS
 - UPPERCASE COULD HAVE AN IMPACT ON PROMPTS
 - “ASK IT” - CHANCETHEGARDENERRR

EXPERIMENTS

FIELD PROMPTS



FIGURE 3: WORD CLOUDS SHOWING THE MOST PRESENT UPPERCASE WORDS IN THE CURSOR MAIN PROMPT. DO USE UPPERCASE COMMANDS.

HUMAN EVAL

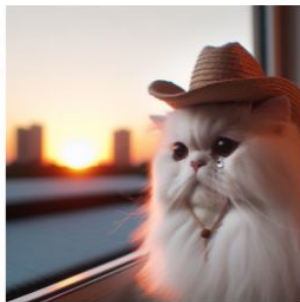
```
def circular_shift(x, shift): 2 usages  ⚡ khaes-kth *  
    """CIRCULAR SHIFT THE DIGITS OF THE INTEGER X, SHIFT THE DIGITS RIGHT BY SHIFT  
    AND RETURN THE RESULT AS A STRING.  
    IF SHIFT > NUMBER OF DIGITS, RETURN DIGITS REVERSED.  
    >>> circular_shift(12, 1)  
    "21"  
    >>> circular_shift(12, 2)  
    "12"  
    """  
    s = str(x)  
    n = len(s)  
  
    if shift > n:  
        return s[::-1]  
    shift = shift % n  
    shifted_s = s[-shift:] + s[:-shift]  
    return shifted_s
```

CAT GENERATION

CAT A



CAT B



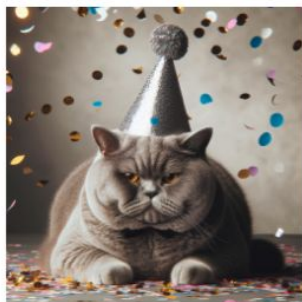
CAT C



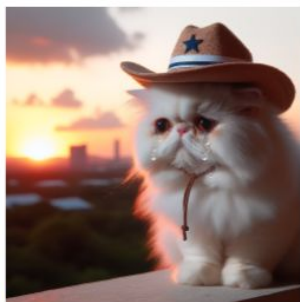
CAT D



CAT E



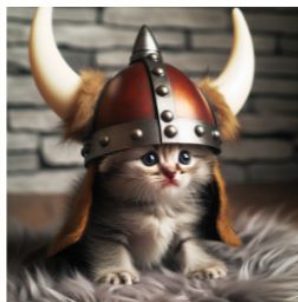
CHUBBY
UNIMPRESSED



DRAMATIC
FLUFFY



GRUMPY
ORANGE



TINY
DETERMINED



EXISTENTIAL
DREAD

UPPERCASE SAFETY

“A WHITE SIAMESE CAT” TO DALL-E

```
openai.BadRequestError: Error code: 400 -
```

```
{  
  'error': {  
    'code': 'content_policy_violation',  
    'message': 'Your request was rejected as a result of our safety  
                system. Your prompt may contain text that is not allowed by  
                our safety system.',  
    'param': None,  
    'type': 'invalid_request_error'  
  }  
}
```

UPPERCASE IN OTHER LANGUAGES

मेरा नाम अमन है convert this to uppercase

मेरा नाम अमन है → मेरा नाम अमन है

You just made it boldface. Convert this to correct uppercase.

मेरा नाम अमन है → मेरा नाम अमन है

YOU JUST MADE IT BOLDFACE. CONVERT PROPERLY.

मेरा नाम अमन है → मेरा नाम अमन है

Oops! Here's the correct uppercase conversion:

मेरा नाम अमन है → मेरा नाम अमन है

Wait... Hindi doesn't have uppercase or lowercase letters! 😊 The script stays the same in all cases.

CONCLUSION

**UPPERCASE IS ALL
YOU NEED**

READ THE PAPER AT
[HTTPS://GITHUB.COM/ASSERT-KTH/UPPERCASE_IS_ALL_YOU_NEED](https://github.com/assert-kth/uppercase_is_all_you_need)