Problem 5: Longest Common Prefix

```python
def longest_common_prefix(strs):

    if not strs:

        return ""

    min_len = min(len(s) for s in strs)

    low, high = 0, min_len – 1


    while low <= high:

        mid = (low + high) // 2

        prefix = strs[0][:mid + 1]


        if all(s.startswith(prefix) for s in strs):

            low = mid + 1

        else:

            high = mid – 1


    return strs[0][:high + 1]


strings = ["apple", "ape", "april"]

lcp = longest_common_prefix(strings)

print("Longest Common Prefix:", lcp)
```

```
19  lcp = longest_common_prefix(strings)
20  print("Longest Common Prefix:", lcp)
21
```

```
input
Longest Common Prefix: ap


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