①

```
def find_longest_word(words_list):
    word_len = []
    for n in words_lists:
        word_len.append((len(n), n))
    word_len.sort()
    return word_len[-1][0], word_len[-1][1]
result = find_longest_word("PHP", "Exercises",
                           "Backend")

print("In longest word:", result[1])
print("Length of the longest word:", result
                                    [0])
```

Output

Longest word: Exercises
Length of the longest word: 9

JAN FEB MAR APR

② Python function to remove the nth index character from a nonempty string.

```
def remove_char(str, n):
    first_part = str[:n]
    last_part = str[n+1:]
    return first_part + last_part
print(remove_char('Congress', 0))
print(remove_char('Python', 3))
print(remove_char('hyderabad', 5))
```

Output :-

- ongress
- Pyton
- hyderbad

→ Python function to sort a string lexicographically:

```
def lexicographi_sort(s):
    return sorted(sorted(s), key=str.upper)

print(lexicographi_sort('America12'))
print(lexicographi_sort('hyderabad'))
```

3) Python function to remove spaces from a given string.

```
def remove(string):
    return "".join(string.split())

string = 'g e e k'
print(remove(string))
```

using split(), join()

⇒ Remove spaces from a string using Python regex :-

```
import re
def remove(string):
    pattern = re.compile(r'\s+')
    return re.sub(pattern, '', string)

string = 'g e e k'
print(remove(string))
```