Question-8:

Capitalize first and last character of each word in a string.

Code:

```
def capitalize_first_last(s):
    result = []
    words = s.split()
    for word in words:
        if len(word) > 1:
            capitalized_word = word[0].upper() + word[1:-1] + word[-1].upper()
        else:
            capitalized_word = word.upper()
        result.append(capitalized_word)
    return ' '.join(result)
input_string = "hello world"
output_string = capitalize_first_last(input_string)
print(output_string)
```

Question-9:

Find the length of the string using recursion

Code:

```
def recursive_length(s):
    if s == "":
        return 0
    return 1 + recursive_length(s[1:])
input_string =input()
print(recursive_length(input_string))
```

Question-10:

Given:

Sample Input-1:

a2b3c4

Sample Output-1:

aabbbcccc

Sample Input-2:

d5e4f3

Sample Output-2:

dddddeeeefff

Code:

```
input_string = "a2b3c4"
result = ""
i = 0
length = len(input_string)
while i < length:
    char = input_string[i]
    i += 1
    num_str = ""
    while i < length and input_string[i].isdigit():
        num_str += input_string[i]
        i += 1
    if num_str:
        num = int(num_str)
        result += char * num
print(result)
```

Question-11:

Print all numbers between 1 to 100 without using any loop

Code:

```
def print_numbers(n):
    if n > 100:
        return
```

```
    print(n)
    print_numbers(n + 1)
print_numbers(1)
```

Question-12:

Find minimum of two numbers without using any conditional statements.

Code:

```
def min_of_two(a, b):
    return (a + b - abs(a - b)) / 2
x = 5
y = 8
print(min_of_two(x, y))
```

Question-13:

Find maximum of two numbers without using any conditional statements.

Code:

```
def max_of_two(a, b):
    return (a + b + abs(a - b)) / 2
x = 5
y = 8
print(max_of_two(x, y))
```

Question-14:

Multiply two numbers without using *

Code:

```
def multiply(a, b):
    result = 0
    for _ in range(abs(b)):
        result += a
    if (a < 0) and (b < 0):
```

```
        result = -result
    return result
x = int(input())
y = int(input())
print(multiply(x, y))
```