1.

For a-z

```
import re

def contains_only_lowercase(input_string):
    pattern = re.compile("^[a-z]word")
    return bool(pattern.match(input_string))
```

For A-Z

```
import re

def contains_only_uppercase(input_string):
    pattern = re.compile("^[A-Z]word")
    return bool(pattern.match(input_string))
```

For 0-9

```
import re

def contains_only_digits(input_string):
    pattern = re.compile("^[0-9]word")
    return bool(pattern.match(input_string))
```

2.

```
import re

def matches_a_followed_by_bs(input_string):
    pattern = re.compile("^ab*$")
    return bool(pattern.match(input_string))
```

3.

```
import re

def matches_a_followed_by_one_or_more_bs(input_string):
    pattern = re.compile("^abword")
    return bool(pattern.match(input_string))
```

4.

```
import re

def matches_a_followed_by_zero_or_one_b(input_string):
    pattern = re.compile("^ab?$")
    return bool(pattern.match(input_string))
```

5.

```
import re

def matches_a_followed_by_three_bs(input_string):
    pattern = re.compile("^ab{3}$")
    return bool(pattern.match(input_string))
```

6.

```
import re

def matches_a_followed_by_two_to_three_bs(input_string):
    pattern = re.compile("^ab{2,3}$")
    return bool(pattern.match(input_string))
```

7.

```
import re

def matches_a_followed_by_anything_ending_in_b(input_string):
    pattern = re.compile("^a.*b$")
    return bool(pattern.match(input_string))
```

8.

```
import re

def matches_word_at_beginning(input_string):
    pattern = re.compile("^\w+")
    match = pattern.match(input_string)
    return match.group() if match else None
```

9.

```
import re

def matches_word_at_end(input_string):
    pattern = re.compile("\w+$")
    match = pattern.search(input_string)
    return match.group() if match else None
```

10.

```
import re

def find_four_digit_words(input_string):
```

```
    pattern = re.compile(r'\b\d{4}\b')
    return pattern.findall(input_string)
```