Regex

**Important Functions:**

re.search(pattern, string) – returns the first occurrence of the pattern as a match object. If no match is found, returns None.

re.findall(pattern, string) – returns a list of each substring that matches the pattern.

**Match object** – always has boolean value of true (good for checking if a match was found). Captured groups can be extracted.

Match.group(0) – returns the entire matched string.

Match.group(n) – returns the captured group with index n (groups are 1 indexed).

Match.groups() – returns a tuple containing captured groups in order. If a group matches multiple times (with \*, + or {n, m}), only the last match is stored.

Match.start()/Match.end() – return the index where the substring starts/ends in the original string.

**Special group notation:**

(?:…) – non-capturing group.

(?P<name>…) – named group.

(?P=name…) – reference back to a named group.

(?=…) – lookahead assertion. Matches whatever comes next, but doesn’t consume it. For example, Isaac (?=Asimov) matches ‘Isaac ‘ only when it is followed by ‘Asimov’.

(?!...) – negative lookahead assertion. Matches only if … doesn’t match what comes next.

Graphical user interface, text, application, email

Description automatically generated