

How can partial string matching be performed in R, and what are some examples?

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Partial string matching in R refers to the process of searching for a particular set of characters within a larger string. This can be achieved using the "grep" function in R, which allows for pattern matching and extraction of the desired partial string. For example, if we have a list of names and want to find all names that contain the letters "an", we can use the command "grep("an", names)" which will return a vector of all names that contain the partial string "an" such as "Samantha" or "Brandon". Other examples of partial string matching in R include using regular expressions or the "sub" function to replace specific partial strings within a string. This can be useful for data cleaning and manipulation tasks. Overall, partial string matching in R is a powerful tool for efficiently extracting and manipulating data based on specific character patterns.

Partial String Matching in R (With Examples)

Often you may want to find the rows in a data frame whose value in a certain column matches some partial string.

Fortunately we can use the function to do so, using the following syntax:

df

This tutorial provides several examples of how to use this function in practice on the following data frame:

#create data frame

```
df <- data.frame(player=c('A', 'B', 'C', 'D', 'E', 'F', 'G'),  
position=c('S Guard', 'P Guard', 'P Guard', 'S Forward',  
'P Forward', 'Center', 'Center'),
```

```
points=c(28, 17, 19, 14, 23, 26, 5))
```

```
#view data frame
```

```
df
```

```
player position points
```

```
1 A S Guard 28
```

```
2 B P Guard 17
```

```
3 C P Guard 19
```

```
4 D S Forward 14
```

```
5 E P Forward 23
```

```
6 F Center 26
```

```
7 G Center 5
```

Example 1: Find Partial Match in a Specific Column

The following code shows how to find all rows in the data frame that contain the string 'Gua' in the position column:

```
df
```

```
player position points
```

```
1 A S Guard 28
```

```
2 B P Guard 17
```

```
3 C P Guard 19
```

And the following code shows how to find all rows in the data frame that contain the string 'P Gua' in the position column:

```
df
```

```
player position points
```

```
2 B P Guard 17
```

```
3 C P Guard 19
```

Example 2: Find Several Partial Matches

The following code shows how to find all rows in the data frame that contain the string 'S Gua' or the string 'Cen' in the position column by using the | operator to indicate "or" in the grep argument:

```
df
```

```
player position points
```

```
1 A S Guard 28
```

```
6 F Center 26
```

```
7 G Center 5
```

Note that we can use the | operator to search for as many partial strings as we'd like.

The following code shows how to use this operator to return the rows with partial strings 'A', 'C', 'D', 'F', or 'G' in the player column:

```
df
```

```
player position points
```

```
1 A S Guard 28
```

```
3 C P Guard 19
```

```
4 D S Forward 14
```

```
6 F Center 26
```

```
7 G Center 5
```

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