

Assignment 5:
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Source code:



```
1 def check_month(entered_month):
2     included_months = ['january', 'february', 'march', 'april', 'may', 'june',
3                         'july', 'august', 'september', 'october', 'november', 'december']
4     return entered_month.lower() in included_months
5
6 def check_day(entered_day):
7     return 1 <= entered_day <= 31
8
9 def parse_date(entered_date):
10    splitted_string = entered_date.strip().split(' ')
11    if len(splitted_string) != 2:
12        return None
13    return [splitted_string[0].lower(), int(splitted_string[1])]
14
15 # Determine the season based on the entered date
16 def get_season(month, day):
17     if (month == 'march' and day >= 20) or (month == 'april') or (month == 'may') or (month == 'june' and day < 21):
18         return 'Spring'
19     elif (month == 'june' and day >= 21) or (month == 'july') or (month == 'august') or (month == 'september' and day < 22):
20         return 'Summer'
21     elif (month == 'september' and day >= 22) or (month == 'october') or (month == 'november') or (month == 'december' and day < 21):
22         return 'Fall'
23     else:
24         return 'Winter'
25
26 def main():
27     # Ask the user to input the date in the format: [month day]
28     entered_date = input("Please enter a date e.g July 10 : ")
29
30     # Parse the entered date to extract month and day
31     parsed_date = parse_date(entered_date)
32     if parsed_date is None:
33         print("Please enter in the correct format as 'January 20.'")
34         return
35
36     entered_month = parsed_date[0].lower()
37     entered_day = parsed_date[1]
38
39     # Check if the parsed month and day is valid
40     if not check_month(entered_month):
41         print(
42             "OOPS !, you entered invalid month.\nMonth must be between January to December.")
43         return
44
45     if not check_day(entered_day):
46         print("OOPS !, you entered invalid day.\nDay must be between 1 to 31.")
47         return
48
49     # Determine and get the season based on entered month and day
50     season = get_season(entered_month, entered_day)
51     print(season)
52
53 main()
```

Test case 1 [March 20]:

```
assign5.py X
assign5.py > ...
1 def check_month(entered_month):
2     included_months = ['january', 'february', 'march', 'april', 'may', 'june',
3         'july', 'august', 'september', 'october', 'november', 'december']
4     return entered_month.lower() in included_months
5
6
7 def check_day(entered_day):
8     return 1 <= entered_day <= 31
9
10
11 def parse_date(entered_date):
12     splitted_string = entered_date.strip().split(' ')
13     if len(splitted_string) != 2:
14         return None
15     return [splitted_string[0].lower(), int(splitted_string[1])]
16
17 # Determine the season based on the entered date
18
19
20 def get_season(month, day):
21     if (month == 'march' and day >= 20) or (month == 'april') or (month == 'may') or (month == 'june' and day < 21):
22         return 'Spring'
23     elif (month == 'june' and day >= 21) or (month == 'july') or (month == 'august') or (month == 'september' and day < 22):
24         return 'Summer'
25     elif (month == 'september' and day >= 22) or (month == 'october') or (month == 'november') or (month == 'december' and day < 21):
26         return 'Fall'
27     else:
28         return 'Winter'
29
30
31 def main():
32     # Ask the user to input the date in the format: [month day]
33     entered_date = input("Please enter a date e.g July 10 : ")
34
35     # Parse the entered date to extract month and day
36     parsed_date = parse_date(entered_date)
37     if parsed_date is None:
```

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```
> python3 assign5.py
Please enter a date e.g July 10 : march 20
Spring
```

Test case 1 [July 15]:

```
assign5.py X
assign5.py > ...
1  def check_month(entered_month):
2      included_months = ['january', 'february', 'march', 'april', 'may', 'june',
3                          'july', 'august', 'september', 'october', 'november', 'december']
4      return entered_month.lower() in included_months
5
6
7  def check_day(entered_day):
8      return 1 <= entered_day <= 31
9
10
11 def parse_date(entered_date):
12     splitted_string = entered_date.strip().split(' ')
13     if len(splitted_string) != 2:
14         return None
15     return [splitted_string[0].lower(), int(splitted_string[1])]
16
17     # Determine the season based on the entered date
18
19
20 def get_season(month, day):
21     if (month == 'march' and day >= 20) or (month == 'april') or (month == 'may') or (month == 'june' and day < 21):
22         return 'Spring'
23     elif (month == 'june' and day >= 21) or (month == 'july') or (month == 'august') or (month == 'september' and day < 22):
24         return 'Summer'
25     elif (month == 'september' and day >= 22) or (month == 'october') or (month == 'november') or (month == 'december' and day < 21):
26         return 'Fall'
27     else:
28         return 'Winter'
29
30
31 def main():
32     # Ask the user to input the date in the format: [month day]
33     entered_date = input("Please enter a date e.g July 10 : ")
34
35     # Parse the entered date to extract month and day
36     parsed_date = parse_date(entered_date)
37     if parsed_date is None:
```

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> python3 assign5.py
Please enter a date e.g July 10 : july 15
Summer

Test case 1 [November 15]:

```
assign5.py X
assign5.py > ...
1  def check_month(entered_month):
2      included_months = ['january', 'february', 'march', 'april', 'may', 'june',
3                          'july', 'august', 'september', 'october', 'november', 'december']
4      return entered_month.lower() in included_months
5
6
7  def check_day(entered_day):
8      return 1 <= entered_day <= 31
9
10
11 def parse_date(entered_date):
12     splitted_string = entered_date.strip().split(' ')
13     if len(splitted_string) != 2:
14         return None
15     return [splitted_string[0].lower(), int(splitted_string[1])]
16
17     # Determine the season based on the entered date
18
19
20 def get_season(month, day):
21     if (month == 'march' and day >= 20) or (month == 'april') or (month == 'may') or (month == 'june' and day < 21):
22         return 'Spring'
23     elif (month == 'june' and day >= 21) or (month == 'july') or (month == 'august') or (month == 'september' and day < 22):
24         return 'Summer'
25     elif (month == 'september' and day >= 22) or (month == 'october') or (month == 'november') or (month == 'december' and day < 21):
26         return 'Fall'
27     else:
28         return 'Winter'
29
30
31 def main():
32     # Ask the user to input the date in the format: [month day]
33     entered_date = input("Please enter a date e.g July 10 : ")
34
35     # Parse the entered date to extract month and day
36     parsed_date = parse_date(entered_date)
37     if parsed_date is None:
38         return
39
40     month, day = parsed_date
41     season = get_season(month, day)
42     print(season)
43
44 if __name__ == '__main__':
45     main()
```

COMMENTS PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
> python3 assign5.py
Please enter a date e.g July 10 : November 15
Fall
```

Test case 1 [sep]:

```
assign5.py X
assign5.py > main
1 def check_month(entered_month):
2     included_months = ['january', 'february', 'march', 'april', 'may', 'june',
3                         'july', 'august', 'september', 'october', 'november', 'december']
4     return entered_month.lower() in included_months
5
6
7 def check_day(entered_day):
8     return 1 <= entered_day <= 31
9
10
11 def parse_date(entered_date):
12     splitted_string = entered_date.strip().split(' ')
13     if len(splitted_string) != 2:
14         return None
15     return [splitted_string[0].lower(), int(splitted_string[1])]
16
17     # Determine the season based on the entered date
18
19
20 def get_season(month, day):
21     if (month == 'march' and day >= 20) or (month == 'april') or (month == 'may') or (month == 'june' and day < 21):
22         return 'Spring'
23     elif (month == 'june' and day >= 21) or (month == 'july') or (month == 'august') or (month == 'september' and day < 22):
24         return 'Summer'
25     elif (month == 'september' and day >= 22) or (month == 'october') or (month == 'november') or (month == 'december' and day < 21):
26         return 'Fall'
27     else:
28         return 'Winter'
29
30
31 def main():
32     # Ask the user to input the date in the format: [month day]
33     entered_date = input("Please enter a date e.g July 10 : ")
34
35     # Parse the entered date to extract month and day
36     parsed_date = parse_date(entered_date)
37     if parsed_date is None:
```

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```
> python3 assign5.py
Please enter a date e.g July 10 : sep
Please enter in the correct format as 'January 20.'
```