In [13]:
```
# Q1
li=[-10, -4, 1,3,2,5,1]
mx=max(li)
idx=li.index(mx)
diff=[]
for i in range(idx):
    diff.append(mx-li[i])
    print(f'({mx}) - ({li[i]}) = {mx-li[i]}')
print('max diff: ',max(diff))
```

```
(5) - (-10) = 15
(5) - (-4) = 9
(5) - (1) = 4
(5) - (3) = 2
(5) - (2) = 3
max diff:  15
```

In [14]:
```
#Q2
with open('story.txt','r') as file:
    text=file.read()
    words=text.split()
    words_set=set(words)
    word_list=[]
    freq=[]
    for word in words_set:
        word_list.append(word)
        freq.append(words.count(word))
        #print(f'{word} => {words.count(word)}')
    mx=sorted(freq)[-2]
    print(word_list[freq.index(mx)])
```

```
a
```

In [77]:
```
# Q3

class Task:
    def __init__(self, priority, name, assignee):
        self.priority=priority
        self.name=name
        self.assignee=assignee
        return None

class PriorityTasks(Task):
    def __init__(self, priority, name, assignee):
        self.priority=priority
        self.name=name
        self.assignee=assignee
        self.create_task()
        return None
    def create_task(self):
        return Task.__init__(self, self.priority, self.name, self.assignee)
    def update_priority(self, new_priority):
        if self.priority==-1:
            self.__del__()
        else:
            self.priority=new_priority
        return None
    def list_tasks(self, task_list):
        for task in task_list:
            print(f'{task.name} created by {task.assignee} has priority as {t
        return None
```

In [78]:
```
task_list=[]
```

In [82]:
```
while True:
    print('Enter Choice: ')
    print('1. Create Task')
    print('2. Update Task Priority')
    print('3. List All Tasks Details')
    print('4. Exit')
    choice=int(input())
    if choice==1:
        p=int(input('Enter Piroty: '))
        n=input('Enter Name: ')
        a=input('Enter Assignee Name: ')
        obj=PriorityTasks(p,n,a)
        task_list.append(obj)
    elif choice==2:
        indx=int(input('Enter Task Index: '))
        p=int(input('Provide Updated Task Priority: '))
        if p==-1:
            del task_list[indx]
        else:
            task_list[indx].update_priority(p)
    elif choice==3:
        if len(task_list)==0:
            print('No Task To Display')
        else:
            PriorityTasks.list_tasks(task_list[0], task_list)
    elif choice==4:
        break
    else:
        break
```

```
Enter Choice:
1. Create Task
2. Update Task Priority
3. List All Tasks Details
4. Exit
3
t1 created by pv has priority as -1
Enter Choice:
1. Create Task
2. Update Task Priority
3. List All Tasks Details
4. Exit
2
Enter Task Index: 0
Provide Updated Task Priority: -1
Enter Choice:
1. Create Task
2. Update Task Priority
3. List All Tasks Details
4. Exit
3
No Task To Display
Enter Choice:
1. Create Task
2. Update Task Priority
```

```
3. List All Tasks Details
4. Exit
4
```