```python
def display(todo_list):
    if not todo_list:
        print("list is empty.")
        return
    print("Your list:")
    for index, task in enumerate(todo_list, start=1):
        print('{}{}'.format('index','task') )


def add(todo_list, task):
    todo_list.append(task)
    print('{} has been added to your list.'.format('task'))


def remove(todo_list, task_index):
    if not todo_list:
        print("Your to-do list is empty.")
        return
    if task_index < 1 or task_index > len(todo_list):
        print(f"Invalid task index: {task_index}")
        return
    task = todo_list.pop(task_index - 1)
    print(' has been removed from your to-do list.'.format('task'))


def main():
    todo_list = []
    while True:
        print("\nOptions:")
        print("1. Display List")
        print("2. Add ")
        print("3. Remove ")
        print("4. Quit")
        choice = input("Enter your choice (1/2/3/4): ")

        if choice == "1":
            display(todo_list)
        elif choice == "2":
            task = input("Enter the task to add: ")
            add(todo_list, task)
        elif choice == "3":
            task_index = int(input("Enter the task index to remove: "))
            remove(todo_list, task_index)
        elif choice == "4":
            print("Exit the program.")
            break
        else:
            print("Invalid choice. Please enter a number between 1 and 4.")


if __name__ == "__main__":
    main()
```

```
Options:
1. Display List
2. Add
3. Remove
4. Quit Enter your choice (1/2/3/4): 1
list is empty.

Options:
1. Display List
2. Add
3. Remove
4. Quit Enter your choice (1/2/3/4): 2
Enter the task to add: 156
task has been added to your list.

Options:
1. Display List
2. Add
3. Remove
4. Quit Enter your choice (1/2/3/4): 3
Enter the task index to remove: 69
Invalid task index: 4

Options:
1. Display List
2. Add
3. Remove
4. Quit Enter your choice (1/2/3/4): 4
Exit the program.
```

In [ ]:

Question:

Write a program to count word frequencies in a given text.
Mini Project: Develop a basic to-do list program using functions and data structures add features like adding tasks in the to-do list, display the tasks and quitting the loop

Solution:

Code:

```
def display(todo_list):
    if not todo_list:
     print("list is empty.")
     return
   print("Your list:")
   for index, task in enumerate(todo_list, start=1):
     print('{}{}'.format('index','task') )
def add(todo_list, task):
   todo_list.append(task)
   print('{} has been added to your list.'.format('task'))
def remove(todo_list, task_index):
   if not todo_list:
      print("Your to-do list is empty.")
      return
  if task_index < 1 or task_index > len(todo_list):
     print(f"Invalid task index: {task_index}")
     return
  task = todo_list.pop(task_index - 1)
  print(' has been removed from your to-do list.'.format('task'))
def main():
  todo_list = []
   while True:
      print("\nOptions:")
      print("1. Display List")
      print("2. Add ")
      print("3. Remove ")
      print("4. Quit")
      choice = input("Enter your choice (1/2/3/4): ")
     if choice == "1":
        display(todo_list)
```

```
    elif choice == "2":
        task = input("Enter the task to add: ")
        add(todo_list, task)
    elif choice == "3":
        task_index = int(input("Enter the task index to remove: "))
        remove(todo_list, task_index)
    elif choice == "4":
        print("Exit the program.")
        break
  else:
        print("Invalid choice. Please enter a number between 1 and 4.")
if __name__ == "__main__":
    main()
```

Output:

Options:

1. Display List
2. Add
3. Remove
4. Quit Enter your choice (1/2/3/4): 1
list is empty.

Options:
1. Display List
2. Add
3. Remove
4. Quit Enter your choice (1/2/3/4): 2
Enter the task to add: 156
task has been added to your list.

Options:
1. Display List
2. Add
3. Remove
4. Quit Enter your choice (1/2/3/4): 3
Enter the task index to remove: 69
Invalid task index: 4

Options:
1. Display List
2. Add
3. Remove
4. Quit Enter your choice (1/2/3/4): 4
Exit the program