Certainly, let's tackle the Go language lab assignments one by one.

Set A

1. Find the largest and smallest number in an array.

```
package main

import "fmt"

func main() {
    numbers := []int{5, 2, 9, 1, 5, 6}

    largest := numbers[0]
    smallest := numbers[0]

    for _, num := range numbers {
        if num > largest {
            largest = num
        }
        if num < smallest {
            smallest = num
        }
    }

    fmt.Println("Largest number:", largest)
    fmt.Println("Smallest number:", smallest)
}
```

Output:

```
Largest number: 9
Smallest number: 1
```

2. Accept book details and display them.

```
package main

import "fmt"

type Book struct {
    BookID string
    Title  string
    Author string
    Price  float64
}

func main() {
    var n int
    fmt.Print("Enter the number of books: ")
    fmt.Scanln(&n)

    books := make([]Book, n)
```

```
    for i := 0; i < n; i++ {
        fmt.Println("Enter details for book", i+1)
        fmt.Print("BookID: ")
        fmt.Scanln(&books[i].BookID)
        fmt.Print("Title: ")
        fmt.Scanln(&books[i].Title)
        fmt.Print("Author: ")
        fmt.Scanln(&books[i].Author)
        fmt.Print("Price: ")
        fmt.Scanln(&books[i].Price)
    }

    fmt.Println("\nBook Details:")
    for _, book := range books {
        fmt.Printf("BookID: %s, Title: %s, Author: %s, Price: %.2f\n",
book.BookID, book.Title, book.Author, book.Price)
    }
}
```

Output (example):

```
Enter the number of books: 2
Enter details for book 1
BookID: B001
Title: The Lord of the Rings
Author: J.R.R. Tolkien
Price: 29.99
Enter details for book 2
BookID: B002
Title: Harry Potter
Author: J.K. Rowling
Price: 19.99

Book Details:
BookID: B001, Title: The Lord of the Rings, Author: J.R.R. Tolkien,
Price: 29.99
BookID: B002, Title: Harry Potter, Author: J.K. Rowling, Price: 19.99
```

3. Initialize a slice using multi-line syntax and display.

```
package main

import "fmt"

func main() {
    numbers := []int{
        1, 2, 3,
        4, 5, 6,
        7, 8, 9,
```

```
    }

    fmt.Println(numbers)
}
```

Output:

```
[1 2 3 4 5 6 7 8 9]
```

Set B

1. Create and print a multidimensional slice.

```
package main

import "fmt"

func main() {
    matrix := [][]int{
        {1, 2, 3},
        {4, 5, 6},
        {7, 8, 9},
    }

    for i := 0; i < len(matrix); i++ {
        for j := 0; j < len(matrix[i]); j++ {
            fmt.Print(matrix[i][j], " ")
        }
        fmt.Println()
    }
}
```

Output:

```
1 2 3
4 5 6
7 8 9
```

2. Sort array elements in ascending order.

```
package main

import "fmt"
import "sort"

func main() {
    numbers := []int{5, 2, 9, 1, 5, 6}

    sort.Ints(numbers)

    fmt.Println(numbers)
}
```

Output:

```
[1 2 5 5 6 9]
```

3. Accept student details and calculate total and average marks using structure.

```
package main

import "fmt"

type Student struct {
    RollNo   int
    StudName string
    Mark1    float64
    Mark2    float64
    Mark3    float64
}

func main() {
    var n int
    fmt.Print("Enter the number of students: ")
    fmt.Scanln(&n)

    students := make([]Student, n)

    for i := 0; i < n; i++ {
        fmt.Println("Enter details for student", i+1)
        fmt.Print("RollNo: ")
        fmt.Scanln(&students[i].RollNo)
        fmt.Print("StudName: ")
        fmt.Scanln(&students[i].StudName)
        fmt.Print("Mark1: ")
        fmt.Scanln(&students[i].Mark1)
        fmt.Print("Mark2: ")
        fmt.Scanln(&students[i].Mark2)
        fmt.Print("Mark3: ")
        fmt.Scanln(&students[i].Mark3)
    }

    fmt.Println("\nStudent Details:")
    for _, student := range students {
        total := student.Mark1 + student.Mark2 + student.Mark3
        average := total / 3.0
        fmt.Printf("RollNo: %d, StudName: %s, Total: %.2f, Average:
%.2f\n", student.RollNo, student.StudName, total, average)
    }
}
```

Output (example):

```
Enter the number of students: 2
```

```
Enter details for student 1
RollNo: 101
StudName: Alice
Mark1: 85
Mark2: 90
Mark3: 88
Enter details for student 2
RollNo: 102
StudName: Bob
Mark1: 78
Mark2: 82
Mark3: 75

Student Details:
RollNo: 101, StudName: Alice, Total: 263.00, Average: 87.67
RollNo: 102, StudName: Bob, Total: 235.00, Average: 78.33
```

If you have more questions or need further assistance, feel free to ask!