**SOURCE CODE :**

package main

import (

"bufio"

"fmt"

"os"

"sort"

"strconv"

"strings"

)

func main() {

// Create an empty slice of integers with initial capacity 3

numbers := make([]int, 0, 3)

reader := bufio.NewReader(os.Stdin)

for {

// Prompt user for input

fmt.Print("Enter an integer or 'X' to exit: ")

input, \_ := reader.ReadString('\n')

input = strings.TrimSpace(input)

// Check if user wants to exit

if strings.ToUpper(input) == "X" {

fmt.Println("Exiting program.")

break

}

// Try to convert input to integer

num, err := strconv.Atoi(input)

if err != nil {

fmt.Println("Invalid input. Please enter a valid integer or 'X' to exit.")

continue

}

// Append number to the slice

numbers = append(numbers, num)

// Sort the slice

sort.Ints(numbers)

// Print the sorted slice

fmt.Println("Sorted slice:", numbers)

}

}

Compilation Result and Output:

