**User Documentation**

**User purpose**

The purpose of this program is to score or come close to a blackjack hand. The values are read through an input file containing the numbers two through ten and face cards jack, queen, king which are scored as tens. Ace can be either one or ten depending on the user’s preference. Moreover, the output will be sent to a file and inside, the results will show either the user busted resulting in a loss or have cards lower than 22.

**Sample Input Sample Output**

2

j j 20

3

q k j busted

4

2 5 t 2 19

5

5 5 5 2 2 19

4

5 3 k q busted

3

a a a 13

2

a a 12

4

a a 8 2 12

3

a k q 21

2

a t 21

2

a q 21

3

f t 3 wrong input data

5

g 3 5 2 3 wrong input data

2

1 k wrong input data

3

j k q busted

-99 to terminate input finish

**Equations**

Ace (either 1 or 11 depending on the hand)

card\_value = 1 if adding 10 will go over 21

card\_value = 11 if adding 11 to the current value is less than 21

(king, queen, jack, and ten) = card\_value = 10

‘2’ to ‘9’ = same numeric value

score = card\_value[]\*number\_of\_cards

**Procedures**

* Create an input file named ‘data’
* Enter the necessary data in the file, such as numbers through two to nine and t(ten) j(jack), q(queen), k(king), a(ace)
* Open the program and type ‘y’ to begin computation
* If the program reads the number ‘-99’ the program will stop
* The program will output the results to a file named ‘results’

**Error check/Error messages/ Recovery actions**

Error Check: Value must be either ‘a’ ‘t’ ‘j’ ‘q’ or ‘k’

Error Message: “wrong input data”

Recovery action: Enter a valid value between 2-9 or one of the letters representing a card.