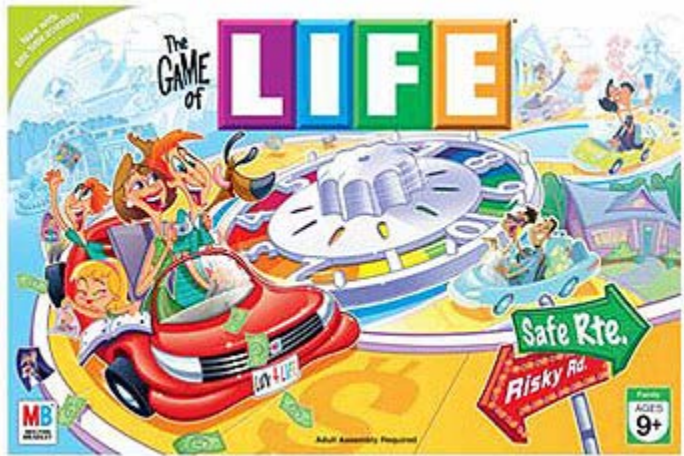


PROGRAM TWO - CROCKETTLAND GAME

(MIXTURE BETWEEN CANDYLAND AND LIFE)



ASSIGNMENT & DUE DATES

- **Assignment Date:** Monday, October 2, 2017
- **Due Date:** Monday, October 23, 201

DESCRIPTION:

You are writing a game where your players navigate through an imaginary world (board) using an imaginary dice. Your imaginary world has good things and bad things in it. Each player begins the game with zero money in their account and on board space zero. Each player has a turn where all they do is roll a dice. When a player lands on a space, either good or bad is selected randomly. If good, then something good happens to the player, a smiley face is printed, and money is added to their account. If bad, then something bad happens to the player, a frown face is printed, and money is subtracted from their account. The game ends when a player lands on or goes past the ending space on the board.

CONSTANT VARIABLES

- Maximum Number of Players possible: 20
- Number of Spaces on Board: 25

OVERALL PROGRAM

- You will have three arrays:
 - **names** – will hold the names of players playing the game. Example: names[0] could hold April Crockett and names[1] could hold Jason Crockett if April & Jason are currently playing the game.
 - **boardSpace** – will hold the current location (space) of players playing the game. Example: boardSpace[0] could hold 15 and boardSpace[2] could hold 6 if April was currently at space 15 on the board and Jason was currently at space 6 on the board.
 - **money** – will hold how much money each player has playing the game. Example: money[0] could hold 50000 and money[1] could hold -4000 if April currently had \$50,000 and Jason had -\$4,000. (yes – people can have a negative balance in the game!)

- You will allow your players to play the game as many times as they want
- You can name your imaginary land whatever you want.
- You will create two text files – bad.txt and good.txt. There is more details on this later in this document.

PROGRAM SPECIFICATIONS / FLOW

- Print out the name of your imaginary land/game. (Mine is called CROCKETTLAND – but you can name yours whatever you want)
- Ask user how many players are playing and validate that they didn't enter more than the maximum number of players – and that it is more then zero.
- Set up your arrays for the start of the game! Set each element of **names** array to an empty string, each element of **boardSpace** array to zero, and each element of **money** array to 0.0.
- Get each player's name and place their name in each element of the **names** array. Notice when the player's names are printed out in the samle output. Your program should print out the player's names in the same way.
- Create a loop that will iterate until one of the players has reached the last space on the board.
- Create another loop to iterate through each of the players for each turn. For each player's turn, you will:
 - Print out the player's name and tell them to press enter to roll die.
 - Randomly generate a number between 1 & 6 (for the dice roll)
 - Print a cool picture of the dice that was rolled
 - code given to you in **dice.cpp**
 - Add the randomly generated number to the position in the **boardSpace** array that corresponds to the current player.
 - If they have reached the end of the board, then print out that they finished the board and then **print the results** (explained in its own section below).
 - If they have not reached the board, then...
 - Print out their current board space and then **display what happens on the space** (explained in its own section below).
 - Randomly generate a number between \$1 and \$100,000 for the money amount.
 - If a good thing happened, then add the random money amount to the **money** array for the current player and print out how much was added. Otherwise, if a bad thing happened, then subtract the money from the **money** array for the current player and print out how much was subtracted.
 - Print out how much money the player has in his or her account.
- After a player reached the ending space on the board and the results have all been printed, then ask the user if they want to play again.

DISPLAY WHAT HAPPENS ON THE SPACE

Display what happens on the space – good or bad. There are two text files containing the text of what happens. You will have to create each text file by opening notepad or another editor and manually typing them. The **good.txt** text file should contain 20 good things that can happen to the player. The **bad.txt** text file should contain 20 bad things that can happen to the player.

- First, randomly generate either a 1 or 2. 1 will represent something good happening and 2 will represent something bad happening.
- If good, then...
 - Open the good.txt file
 - Print out a big smiley face (doesn't have to look exactly like mine but it has to be happy)
 - Print the word "GREAT! " (or something similar)
- If bad, then...
 - Open the bad.txt file
 - Print out a big frowny face (doesn't have to look exactly like mine but it has to be sad)
 - Print the word "OH NO! " (or something similar)
- Then randomly generate a number between 1 & 20.
- Use a for loop that iterates the number of times that was randomly generated in the step above.
 - In the for loop, read in a line from the file using getline.
- After the for loop, print out the line from the file

PRINT THE RESULTS

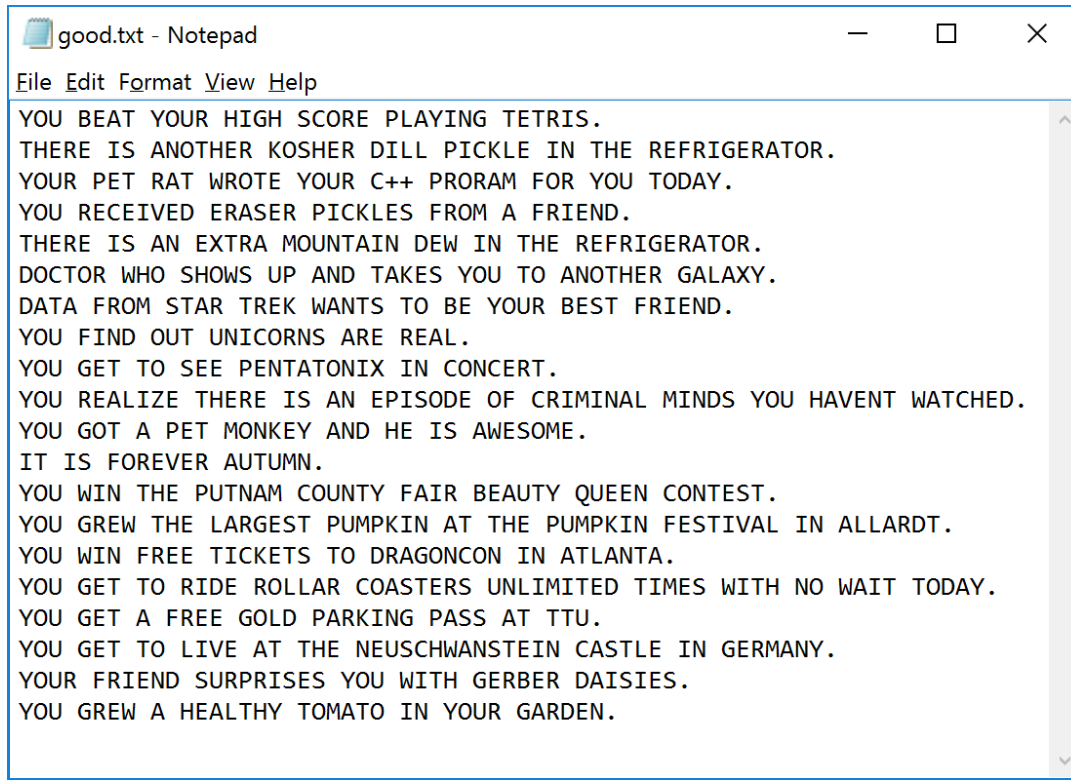
This code should execute when one of the players reached the last space on the board. It will display the results of the game – who reached the end of the board and also who ended up with the most money.

- Use a for loop to iterate through the **boardSpace** array and find the player who reached the highest boardSpace. Capture this player's name.
- Print out the player who had the highest board space.
- Use a for loop to iterate through the **money** array and find the player who had the most money at the end of the game. Capture this player's name.
- Print out the player who had the most money.



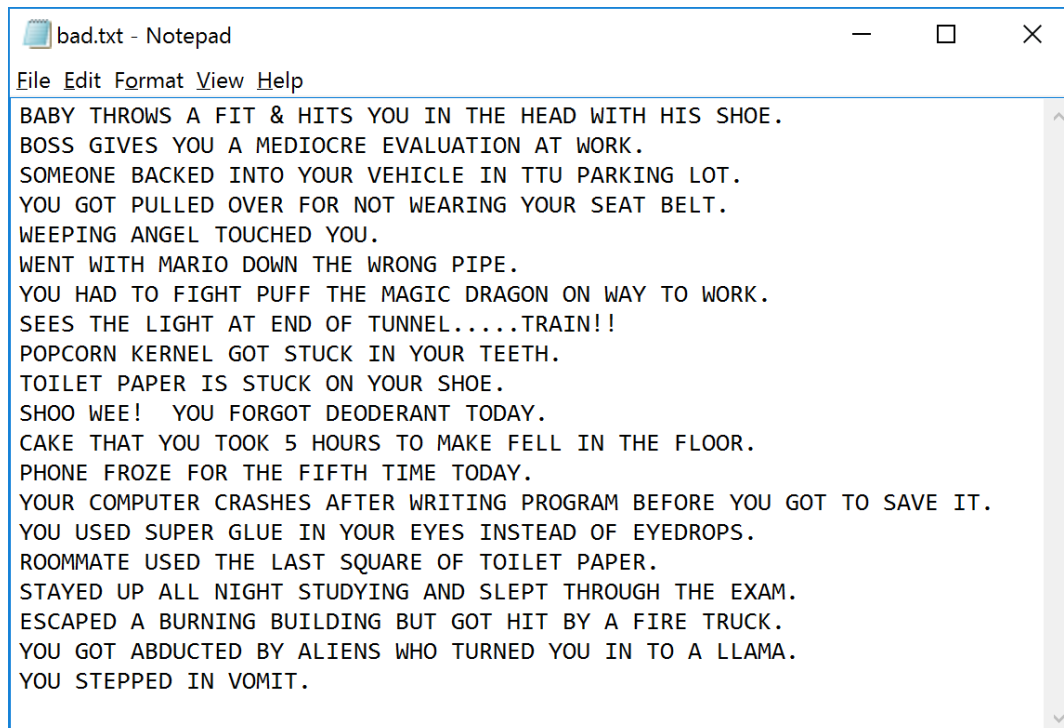
OUTPUT – YOUR OUTPUT SHOULD LOOK VERY SIMILAR TO MINE!!

SAMPLE TEXT FILE – good.txt (YOU HAVE TO WRITE YOUR OWN GOOD ACTIONS!)



```
good.txt - Notepad
File Edit Format View Help
YOU BEAT YOUR HIGH SCORE PLAYING TETRIS.
THERE IS ANOTHER KOSHER DILL PICKLE IN THE REFRIGERATOR.
YOUR PET RAT WROTE YOUR C++ PRORAM FOR YOU TODAY.
YOU RECEIVED ERASER PICKLES FROM A FRIEND.
THERE IS AN EXTRA MOUNTAIN DEW IN THE REFRIGERATOR.
DOCTOR WHO SHOWS UP AND TAKES YOU TO ANOTHER GALAXY.
DATA FROM STAR TREK WANTS TO BE YOUR BEST FRIEND.
YOU FIND OUT UNICORNS ARE REAL.
YOU GET TO SEE PENTATONIX IN CONCERT.
YOU REALIZE THERE IS AN EPISODE OF CRIMINAL MINDS YOU HAVENT WATCHED.
YOU GOT A PET MONKEY AND HE IS AWESOME.
IT IS FOREVER AUTUMN.
YOU WIN THE PUTNAM COUNTY FAIR BEAUTY QUEEN CONTEST.
YOU GREW THE LARGEST PUMPKIN AT THE PUMPKIN FESTIVAL IN ALLARDT.
YOU WIN FREE TICKETS TO DRAGONCON IN ATLANTA.
YOU GET TO RIDE ROLLAR COASTERS UNLIMITED TIMES WITH NO WAIT TODAY.
YOU GET A FREE GOLD PARKING PASS AT TTU.
YOU GET TO LIVE AT THE NEUSCHWANSTEIN CASTLE IN GERMANY.
YOUR FRIEND SURPRISES YOU WITH GERBER DAISIES.
YOU GREW A HEALTHY TOMATO IN YOUR GARDEN.
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SAMPLE TEXT FILE – bad.txt (YOU HAVE TO WRITE YOUR OWN BAD ACTIONS)



```
bad.txt - Notepad
File Edit Format View Help
BABY THROWS A FIT & HITS YOU IN THE HEAD WITH HIS SHOE.
BOSS GIVES YOU A MEDIOCRE EVALUATION AT WORK.
SOMEONE BACKED INTO YOUR VEHICLE IN TTU PARKING LOT.
YOU GOT PULLED OVER FOR NOT WEARING YOUR SEAT BELT.
WEeping ANGEL TOUCHED YOU.
WENT WITH MARIO DOWN THE WRONG PIPE.
YOU HAD TO FIGHT PUFF THE MAGIC DRAGON ON WAY TO WORK.
SEES THE LIGHT AT END OF TUNNEL.....TRAIN!!
POPCORN KERNEL GOT STUCK IN YOUR TEETH.
TOILET PAPER IS STUCK ON YOUR SHOE.
SHOO WEE! YOU FORGOT DEODERANT TODAY.
CAKE THAT YOU TOOK 5 HOURS TO MAKE FELL IN THE FLOOR.
PHONE FROZE FOR THE FIFTH TIME TODAY.
YOUR COMPUTER CRASHES AFTER WRITING PROGRAM BEFORE YOU GOT TO SAVE IT.
YOU USED SUPER GLUE IN YOUR EYES INSTEAD OF EYEDROPS.
ROOMMATE USED THE LAST SQUARE OF TOILET PAPER.
STAYED UP ALL NIGHT STUDYING AND SLEPT THROUGH THE EXAM.
ESCAPED A BURNING BUILDING BUT GOT HIT BY A FIRE TRUCK.
YOU GOT ABDUCTED BY ALIENS WHO TURNED YOU IN TO A LLAMA.
YOU STEPPED IN VOMIT.
```

```
C:\Windows\System32\cmd.exe - prog2
C:\Users\acrockett\Desktop\CSC1300 Fall 2017\PROGRAMS\PROGRAM TWO - CROCKETTLAND board game - ^
due october 23>prog2

YOU ARE PLAYING CROCKETTLAND!
How many players? 2

PLAYER 1, WHAT IS YOUR NAME?
NAME: BammaLammaJamJam

PLAYER 2, WHAT IS YOUR NAME?
NAME: Grape Ape

-----
BammaLammaJamJam, PRESS ENTER TO ROLL DIE.
YOU ROLLED A 3.

  o
  o
  o

BammaLammaJamJam IS NOW ON SPACE 3

      *      *
      |
  \      /
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GREAT! YOU BEAT YOUR HIGH SCORE PLAYING TETRIS.
ADDED $2118.00 TO YOUR ACCOUNT.
YOU NOW HAVE $2118.00 IN YOUR ACCOUNT.

C:\Windows\System32\cmd.exe - prog2
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Grape Ape, PRESS ENTER TO ROLL DIE.
YOU ROLLED A 5.

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  o   o
  o   o

Grape Ape IS NOW ON SPACE 5

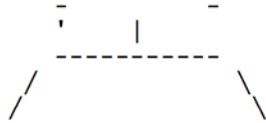
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OH NO! SOMEONE BACKED INTO YOUR VEHICLE IN TTU PARKING LOT.
SUBTRACTED $5623.00 FROM YOUR ACCOUNT.
YOU NOW HAVE $-5623.00 IN YOUR ACCOUNT.
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BammaLammaJamJam, PRESS ENTER TO ROLL DIE.
YOU ROLLED A 6.

  o   o
  o   o
  o   o
```

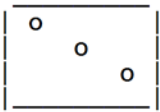
C:\Windows\System32\cmd.exe - prog2

BammaLammaJamJam IS NOW ON SPACE 9

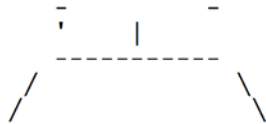


OH NO! YOU STEPPED IN VOMIT.
SUBTRACTED \$7731.00 FROM YOUR ACCOUNT.
YOU NOW HAVE \$-5613.00 IN YOUR ACCOUNT.

Grape Ape, PRESS ENTER TO ROLL DIE.
YOU ROLLED A 3.



Grape Ape IS NOW ON SPACE 8

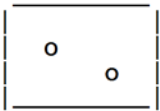


OH NO! CAKE THAT YOU TOOK 5 HOURS TO MAKE FELL IN THE FLOOR.
SUBTRACTED \$4022.00 FROM YOUR ACCOUNT.

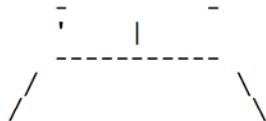
C:\Windows\System32\cmd.exe - prog2

YOU NOW HAVE \$-9645.00 IN YOUR ACCOUNT.

BammaLammaJamJam, PRESS ENTER TO ROLL DIE.
YOU ROLLED A 2.

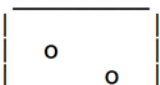


BammaLammaJamJam IS NOW ON SPACE 11



OH NO! ROOMMATE USED THE LAST SQUARE OF TOILET PAPER.
SUBTRACTED \$17264.00 FROM YOUR ACCOUNT.
YOU NOW HAVE \$-22877.00 IN YOUR ACCOUNT.

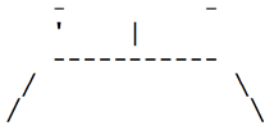
Grape Ape, PRESS ENTER TO ROLL DIE.
YOU ROLLED A 2.



C:\Windows\System32\cmd.exe - prog2

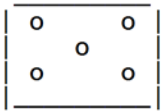
| _____ |

Grape Ape IS NOW ON SPACE 10

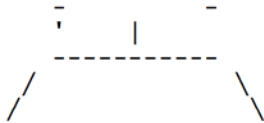


OH NO! YOU HAD TO FIGHT PUFF THE MAGIC DRAGON ON WAY TO WORK.
SUBTRACTED \$28809.00 FROM YOUR ACCOUNT.
YOU NOW HAVE \$-38454.00 IN YOUR ACCOUNT.

BammaLammaJamJam, PRESS ENTER TO ROLL DIE.
YOU ROLLED A 5.



BammaLammaJamJam IS NOW ON SPACE 16

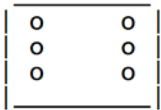


OH NO! WEEPING ANGEL TOUCHED YOU.

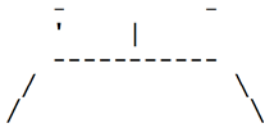
C:\Windows\System32\cmd.exe - prog2

SUBTRACTED \$8611.00 FROM YOUR ACCOUNT.
YOU NOW HAVE \$-31488.00 IN YOUR ACCOUNT.

Grape Ape, PRESS ENTER TO ROLL DIE.
YOU ROLLED A 6.



Grape Ape IS NOW ON SPACE 16



OH NO! YOUR COMPUTER CRASHES AFTER WRITING PROGRAM BEFORE YOU GOT TO SAVE IT.
SUBTRACTED \$3935.00 FROM YOUR ACCOUNT.
YOU NOW HAVE \$-42389.00 IN YOUR ACCOUNT.

BammaLammaJamJam, PRESS ENTER TO ROLL DIE.
YOU ROLLED A 4.



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A diagram of a rectangular box with four circles at the corners and one in the center.

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