



# Objectives

- Control the case of characters and strings
- Determine the number of characters contained in a string
- Compare a portion of a string variable's contents to another string
- Determine whether a string is contained within a string variable
- Replace a portion of a string variable's contents with another string
- Assign a portion of a string variable's contents to another string variable
- Duplicate a character within a string variable
- Concatenate strings
- Clear the contents of the DOS window



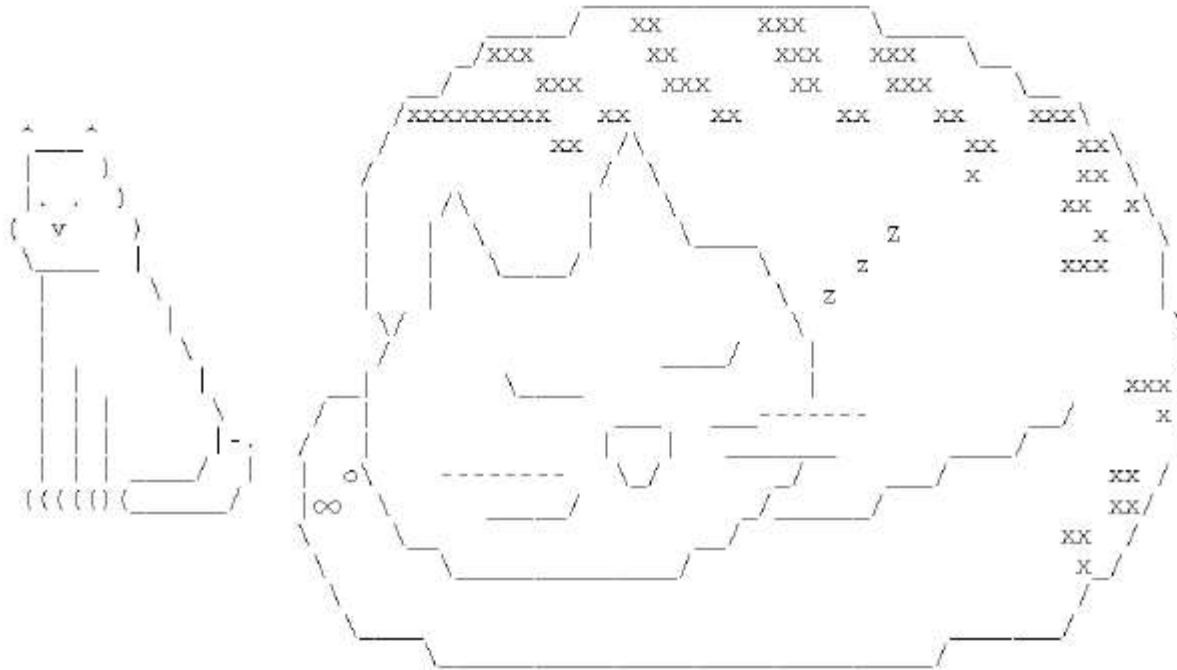
# Reminder

- You can use the C++ replace function to replace a portion of a string variable's contents with another string
- Connecting (or linking) strings together is called concatenating
- The concatenation operator in C++ is the plus sign (+)



## ■ ASCII Art

- Half of the lines of code in the Hangman **aren't really code at all**.
- Multiline Strings that use **keyboard characters** to draw pictures.
  - **ASCII** stands for **American Standard Code for Information Interchange**

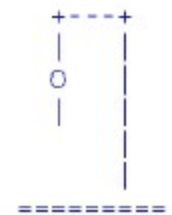




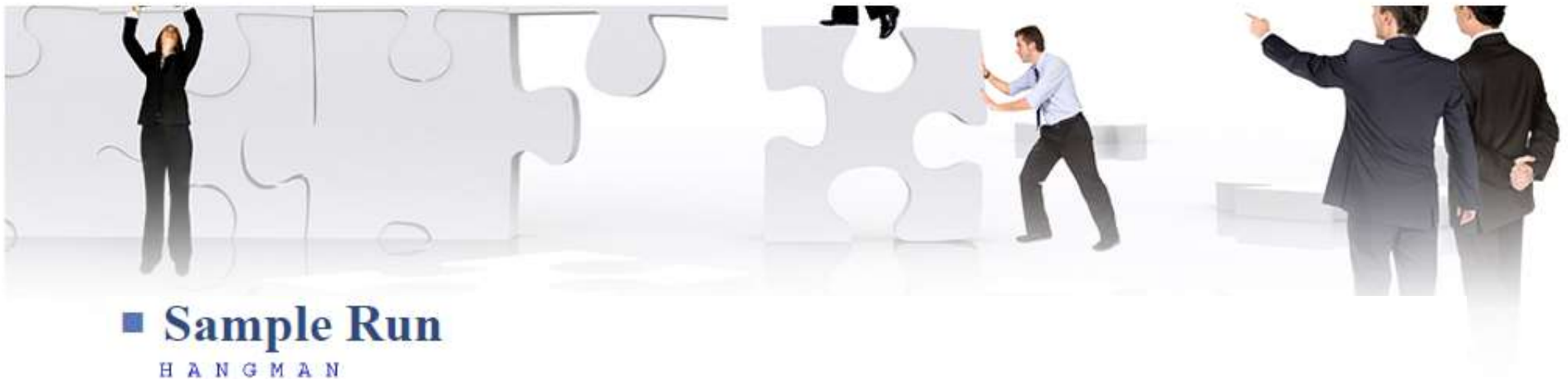
# Hangman

In case you aren't familiar with the game Hangman, the rules are as follows:

1. Computer chooses a secret word, then writes out a number of dashes equal to the word length.
2. The player begins guessing letters. Whenever s/he guesses a letter contained in the hidden word, the computer reveals each instance of that letter in the word. Otherwise, the guess is wrong.
3. The game ends either when all the letters in the word have been revealed or when the guesser has run out of guesses.



```
Missed letters: or
_ a _
Guess a letter.
t
```



## ■ Sample Run

H A N G M A N

```

+---+
|
|
=====
Missed letters:
_ _ _ a _
Guess a letter.
a

```

```

+---+
|
|
=====
Missed letters:
_ a _
Guess a letter.
o

```

```

+---+
|
|
=====
Missed letters: o
_ a _
Guess a letter.
r

```

```

+---+
|
|
=====
Missed letters: or
_ a _
Guess a letter.
t

```

```

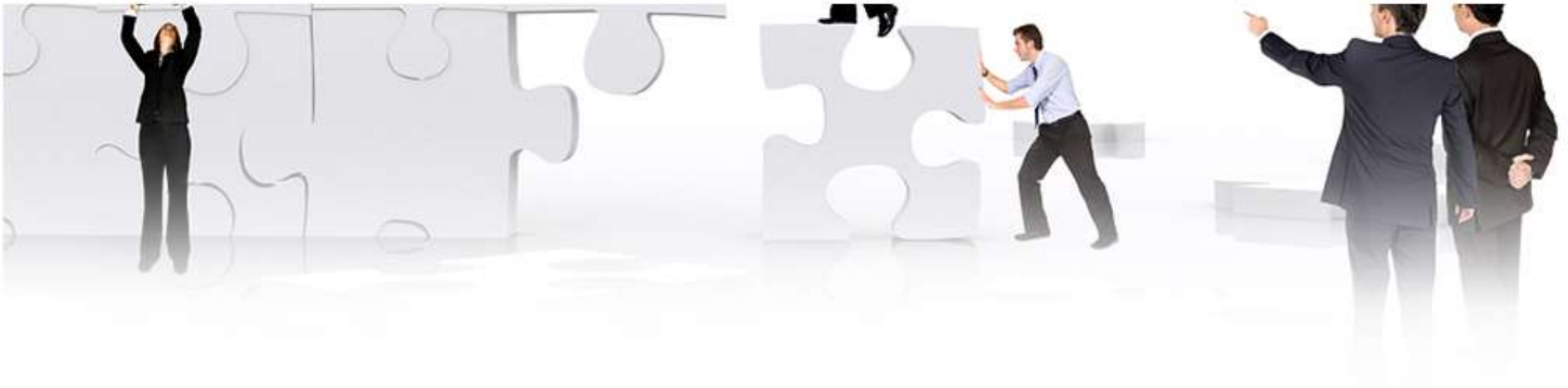
+---+
|
|
=====
Missed letters: or
_ a t
Guess a letter.
a
You have already guessed that letter. Choose again.
Guess a letter.
c
Yes! The secret word is "cat"! You have won!
Do you want to play again? (yes or no)
no

```



# Hangman

- Use file “CommonWords.txt” to randomly choose a word..
  - You MUST determine how many words are in the file
  - FYI only: the file has **337 lines, each is a word**
- #include “clearScreen.h” , use function clearScreen() to ...
- Initial art drawing sample in file: DrawGallows.txt
- You must properly design your code: Decide on appropriate functions needed.
- If player reused a letter again, it will not affect # of guesses left. The user will see a message saying “you guessed this letter before”
- Every wrong guess adds a part to the hangman.
- A list of missed letters is always displayed as well as well as guesses left



**THAT'S ALL FOLKS!**