

## Hangman Program

Create the following program in C#. Call it *Hangman*

- Create a variable *guessesRemaining* and set it to 6
- Create three arrays: *word*[a 5 letter word of your choice], *guessWord* [5 underscores] and *badGuesses*[6 empty cells]
  - 'guessWord' will be the series of blank underscores that we use to guess the final word.
  - 'badGuesses' stores the characters that are not in the word we are trying to guess.
- Create a message to the user to explain what they need to do i.e. type in letters to guess the word...
- Set up a loop to constantly ask the user for a letter, until *guessesRemaining* equals 0 or the *guessWord* array is equal to the *word* array.
- Create a function called *LetterInWord* which takes the letter that the user has typed in as a parameter and returns true or false

Within this function:

- If the user has already have already guessed that letter, tell them and ask them to enter another letter. **Remember**, some words may contain the same letter more than once!
  - If the user has not guessed it yet, and it is in the *word* array, then find out where that letter is. Replace the underscore in the *guessWord* array with that letter
  - If we have not guessed it yet, and it is not in the *word* array, then add it to the *badGuesses* array
  - Decrement *guessesRemaining*
  - Display the contents of *guessWord* separated by spaces along with a sensible message
- Once we have exited out of the loop, if *guessesRemaining* equals 0 we have lost, if not we have won the game. Either way, tell the user and show the word!

## Extension

- Modify your basic hangman game to include an array of ten 5 letter words. When the game starts, randomly pick one of the words to be guessed