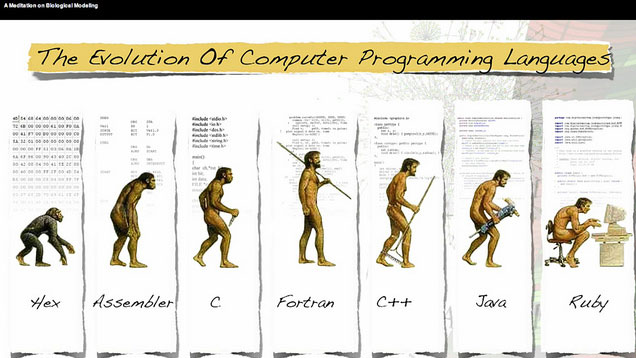
***COP2270***

***M/W***

***Spring 2017-2018***



***Professor: Yassin Raef***

***Anaisy Garcia***

***Chapter 8 Homework/ Exercises***

***One problem per page Please***

***Figure 8-2***

|  |
| --- |
| ***Commands*** |
| ***// Fig 8.2: fig08\_02.c***  ***// Using functions isdigit, isalpha, isalnum, and isxdigit***  ***#include <stdio.h>***  ***#include <ctype.h>***  ***int main(void)***  ***{***  ***printf("%s\n%s%s\n%s%s\n\n", "According to isdigit: ",***  ***isdigit('8') ? "8 is a " : "8 is not a ", "digit",***  ***isdigit('#') ? "#is a " : "# is not a ", "digit");***  ***printf("%s\n%s%s\n%s%s\n%s%s\n%s%s\n\n",***  ***"According to isalpha:",***  ***isalpha('A') ? "A is a " : "A is not a ", "letter",***  ***isalpha('b') ? "b is a " : "b is not a ", "letter",***  ***isalpha('&') ? "& is a " : "& is not a ", "letter",***  ***isalpha('4') ? "4 is a " : "4 is not a ", "letter");***  ***printf("%s\n%s%s\n%s%s\n%s%s\n\n",***  ***"According to isalnum",***  ***isalnum('A') ? "A is a " : "A is not a ",***  ***"digit or a letter",***  ***isalnum('8') ? "8 is a " : "8 is not a ",***  ***"digit os a letter",***  ***isalnum('#') ? "# is a " : "# is not a ",***  ***"digit or a letter");***  ***printf("%s\n%s%s\n%s%s\n%s%s\n%s%s\n%s%s\n",***  ***"According to isxdigit:",***  ***isxdigit('F') ? "F is a " : "F is not a ",***  ***"hexadecimal digit",***  ***isxdigit('J') ? "J is a " : "J is not a ",***  ***"hexadecimal digit",***  ***isxdigit('7') ? "7 is a " : "7 is not a ",***  ***"hexadecimal digit",***  ***isxdigit('$') ? "$ is a " : "$ is not a ",***  ***"hexadecimal digit",***  ***isxdigit('f') ? "f is a " : "f is not a ",***  ***"hexadecimal digit");***  ***}*** |

|  |
| --- |
| ***Output*** |
| */Users/Icey4444/Desktop/Screen Shot 2018-04-04 at 2.31.32 PM.png* |

***Figure 8-3***

|  |
| --- |
| ***Commands*** |
| ***// Fig. 8.3: fig08\_03.c***  ***// Using functions islower, isupper, tolower and toupper***  ***#include <stdio.h>***  ***#include <ctype.h>***  ***int main(void)***  ***{***  ***printf("%s\n%s%s\n%s%s\n%s%s\n%s%s\n\n",***  ***"According to islower:",***  ***islower('p') ? "p is a " : "p is not a ",***  ***"lowercase letter",***  ***islower('P') ? "P is a " : "P is not a ",***  ***"lowercase letter",***  ***islower('5') ? "5 is a " : "5 is not a ",***  ***"lowercase letter",***  ***islower('!') ? "! is a " : "! is not a ",***  ***"lowercase letter");***  ***printf("%s\n%s%s\n%s%s\n%s%s\n%s%s\n\n",***  ***"According to isupper:",***  ***isupper('D') ? "D is a " : "D is not a ",***  ***"uppercase letter",***  ***isupper('d') ? "d is a " : "d is not a ",***  ***"uppercase letter",***  ***isupper('8') ? "8 is a " : "8 is not a ",***  ***"uppercase letter",***  ***isupper('$') ? "$ is a " : "$ is not a ",***  ***"uppercase letter");***  ***printf("%s%c\n%s%c\n%s%c\n%s%c\n",***  ***"u converted to uppercase is ", toupper('u') ,***  ***"7 converted to uppercase is ", toupper('7') ,***  ***"$ converted to uppercase is ", toupper('u') ,***  ***"L converted to lowercase is ", tolower('L') );***  ***}*** |

|  |
| --- |
| ***Output*** |
| *../Screen%20Shot%202018-04-04%20at%202.50.08%20PM.png* |

***Figure 8-4***

|  |
| --- |
| ***Commands*** |
| ***// Fig. 8.4: fig08\_04.c***  ***// Using functions isspace, iscntrl, ispunct, isprint and isgraph***  ***#include <stdio.h>***  ***#include <ctype.h>***  ***int main(void)***  ***{***  ***printf("%s\n%s%s%s\n%s%s%s\n%s%s\n\n",***  ***"According to isspace:",***  ***"Newline", isspace('\n') ? " is a " : " is not a ",***  ***"whitespace character", "Horizontal tab",***  ***isspace('\t') ? " is a " : " is not a ",***  ***"whitespace character",***  ***isspace('%') ? "% is a " : "% is not a ",***  ***"whitespace character");***  ***printf("%s\n%s%s%s\n%s%s\n\n", "According to iscntrl:",***  ***"Newline", iscntrl('\n') ? " is a " : " is not a ",***  ***"control character", iscntrl('$') ? "$ is a " :***  ***"$ is not a ", "control character");***  ***printf("%s\n%s%s\n%s%s\n%s%s\n\n",***  ***"According to ispunct:",***  ***ispunct(':') ? "; is a " : "; is not a ",***  ***"punctuation character",***  ***ispunct('Y') ? "Y is a " : "Y is not a ",***  ***"punctuation character",***  ***ispunct('#') ? "# is a " : "# is not a ",***  ***"punctuation character");***  ***printf("%s\n%s%s\n%s%s%s\n\n", "According to isprint:",***  ***isprint('$') ? "$ is a " : "$ is not a ",***  ***"printing character",***  ***"Alert", isprint('\a') ? " is a " : " is not a ",***  ***"printing character");***  ***printf("%s\n%s%s\n%s%s%s\n\n", "According to isgraph:",***  ***isgraph('Q') ? "Q is a " : "Q is not a ",***  ***"printing character other than a space",***  ***"Space", isgraph(' ') ? " is a " : " is not a ",***  ***"printing character other than a space");***  ***}*** |

|  |
| --- |
| ***Output*** |
| *../Screen%20Shot%202018-04-15%20at%209.33.21%20PM.png* |

***Figure 8-6***

|  |
| --- |
| ***Commands*** |
| ***// Fig. 8.6:fig08\_06.c***  ***// Using function strtod***  ***#include <stdio.h>***  ***#include <stdlib.h>***  ***int main(void)***  ***{***  ***const char \*string = "51.2% are admitted"; // initialize string***  ***char \*stringPtr; //create char pointer***  ***double d = strtod(string, &stringPtr);***  ***printf("The string \"%s\" is converted to the\n", string);***  ***printf("double value %.2f and the string \"%s\"\n", d, stringPtr);***  ***}*** |

|  |
| --- |
| ***Output*** |
| *../Screen%20Shot%202018-04-15%20at%209.46.21%20PM.png* |

***Figure 8-7***

|  |
| --- |
| ***Commands*** |
| ***// Fig. 8.7: fig08\_07.c***  ***// Using function strtol***  ***#include <stdio.h>***  ***#include <stdlib.h>***  ***int main(void)***  ***{***  ***const char \*string = "-1234567abc";***  ***char \*remainderPtr;***  ***long x = strtol(string, &remainderPtr, 0);***  ***printf("%s\"%s\"\n%s%ld\n%s\"%s\"\n%s%ld\n",***  ***"The original string is ", string,***  ***"The converted value is ", x,***  ***"The remainder of the original string is ",***  ***remainderPtr,***  ***"The converted value plus 567 is ", x + 567);***  ***}*** |

|  |
| --- |
| ***Output*** |
| *../Screen%20Shot%202018-04-15%20at%2010.02.03%20PM.png* |

***Figure 8-8***

|  |
| --- |
| ***Commands*** |
| ***// Fig. 8.8: fig08\_08.c***  ***// Using function strtol***  ***#include <stdio.h>***  ***#include <stdlib.h>***  ***int main(void)***  ***{***  ***const char \*string = "1234567abc";***  ***char \*remainderPtr;***  ***unsigned long int x = strtol(string, &remainderPtr, 0);***  ***printf("%s\"%s\"\n%s%ld\n%s\"%s\"\n%s%ld\n",***  ***"The original string is ", string,***  ***"The converted value is ", x,***  ***"The remainder of the original string is ",***  ***remainderPtr,***  ***"The converted value minus 567 is ", x - 567);***  ***}*** |

|  |
| --- |
| ***Output*** |
| *../Screen%20Shot%202018-04-15%20at%2010.02.03%20PM.png* |

***Figure 8-10***

|  |
| --- |
| ***Commands*** |
| ***// Fig. 8.10: fig08\_10.c***  ***// Using function fgets and putchar***  ***#include <stdio.h>***  ***#define SIZE 80***  ***void reverse(const char \* const sPtr);***  ***int main(void)***  ***{***  ***char sentence[SIZE];***  ***puts("Enter a line of text:");***  ***fgets(sentence, SIZE, stdin);***  ***printf("\n%s", "The line printed backward is:");***  ***reverse(sentence);***  ***}***  ***void reverse(const char \* const sPtr)***  ***{***  ***if ('\0' == sPtr[0]) {***  ***return;***  ***}***  ***else {***  ***reverse(&sPtr[1]);***  ***putchar(sPtr[0]);***  ***}***  ***}*** |

|  |
| --- |
| ***Output*** |
| *../Screen%20Shot%202018-04-15%20at%2010.20.21%20PM.png* |

***Figure 8-11***

|  |
| --- |
| ***Commands*** |
| ***// Fig. 8.11: fig08\_11.c***  ***// Using function getchar***  ***#include <stdio.h>***  ***#define SIZE 80***  ***int main(void)***  ***{***  ***int c;***  ***char sentence[SIZE];***  ***int i = 0;***  ***puts("Enter a line of text:");***  ***while ((i < SIZE - 1) && (c = getchar()) != '\n') {***  ***sentence[i++] = c;***  ***}***  ***sentence[i] = '\0';***  ***puts("\nThe line entered was:");***  ***puts(sentence);***  ***}*** |

|  |
| --- |
| ***Output*** |
| *../Screen%20Shot%202018-04-15%20at%2010.25.35%20PM.png* |

***Figure 8-12***

|  |
| --- |
| ***Commands*** |
| ***// Fig. 8.12: fig08\_12.c***  ***// Using function sprintf***  ***#include <stdio.h>***  ***#define SIZE 80***  ***int main(void)***  ***{***  ***int x;***  ***double y;***  ***puts("Enter an integer and a double:");***  ***scanf("%d%lf", &x, &y);***  ***char s[SIZE];***  ***sprintf(s, "integer:%6d\ndouble:%7.2f", x, y);***  ***printf("%s\n%s\n", "The formatted output stored in array s is:", s);***  ***}*** |

|  |
| --- |
| ***Output*** |
| *../Screen%20Shot%202018-04-15%20at%2010.32.35%20PM.png* |

***Figure 8-13***

|  |
| --- |
| ***Commands*** |
| ***// Fig. 8.13: fig08\_13.c***  ***// Using function sscanf***  ***#include <stdio.h>***  ***int main(void)***  ***{***  ***char s[] = "31298 87.375";***  ***int x;***  ***double y;***  ***sscanf(s, "%d%lf", &x, &y);***  ***printf("%s\n%s%6d\n%s%8.3f\n",***  ***"The values stored in character array s are:",***  ***"integer:", x, "double:", y);***  ***}*** |

|  |
| --- |
| ***Output*** |
| *../Screen%20Shot%202018-04-15%20at%2010.37.58%20PM.png* |

***Figure 8-15***

|  |
| --- |
| ***Commands*** |
| ***// Fig. 8.13: fig08\_13.c***  ***// Using function strcpy and strncpy***  ***#include <stdio.h>***  ***#include <string.h>***  ***#define SIZE1 25***  ***#define SIZE2 15***  ***int main(void)***  ***{***  ***char x[] = "Happy Birthday to You";***  ***char y[SIZE1];***  ***char z[SIZE2];***  ***printf("%s%s\n%s%s\n",***  ***"The string in array x is: ", x,***  ***"The string in array y is: ", strcpy(y, x));***  ***strncpy(z, x, SIZE2 - 1);***  ***z[SIZE2 - 1] = '\0';***  ***printf("The string in array z is: %s\n", z);***  ***}*** |

|  |
| --- |
| ***Output*** |
| *../Screen%20Shot%202018-04-15%20at%2010.45.28%20PM.png* |

***Figure 8-16***

|  |
| --- |
| ***Commands*** |
| ***// Fig. 8.13: fig08\_13.c***  ***// Using function strcpy and strncpy***  ***#include <stdio.h>***  ***#include <string.h>***  ***int main(void)***  ***{***  ***char s1[20] = "Happy ";***  ***char s2[] = "New Year ";***  ***char s3[40] = "";***  ***printf("s1 = %s\ns2 = %s\n", s1, s2);***  ***printf("strcat(s2, s1) = %s\n", strcat(s1, s2) );***  ***printf("strncat(s3, s1, 6) = %s\n", strncat(s3, s1, 6));***  ***printf("strcat(s3, s1) = %s\n", strcat(s3, s1) );***  ***}*** |

|  |
| --- |
| ***Output*** |
| *../Screen%20Shot%202018-04-15%20at%2010.57.38%20PM.png* |

***Figure 8-18***

|  |
| --- |
| ***Commands*** |
| ***// Fig. 8.18: fig08\_18.c***  ***// Using function***  ***#include <stdio.h>***  ***#include <string.h>***  ***int main(void)***  ***{***  ***const char \*s1 = "Happy New Year";***  ***const char \*s2 = "Happy New Year";***  ***const char \*s3 = "Happy Holidays";***  ***printf("%s%s\n%s%s\n%s%s\n\n%s%2d\n%s%2d\n%s%2d\n\n",***  ***"s1 = ", s1, "s2 = ", s2, "s3 = ", s3,***  ***"strcmp(s1, s2) = ", strcmp(s1, s2) ,***  ***"strcmp(s1, s3) = ", strcmp(s1, s3) ,***  ***"strcmp(s3, s1) = ", strcmp(s3, s1) );***  ***printf("%s%2d\n%s%2d\n%s%2d\n",***  ***"strncmp(s1, s3, 6) = ", strncmp(s1, s3, 6) ,***  ***"strncmp(s1, s3, 7) = ", strncmp(s1, s3, 7) ,***  ***"strncmp(s3, s1, 7) = ", strncmp(s3, s1, 7) );***  ***}*** |

|  |
| --- |
| ***Output*** |
| *../Screen%20Shot%202018-04-17%20at%2010.52.33%20PM.png* |

***Figure 8-20***

|  |
| --- |
| ***Commands*** |
| ***// Fig. 8.20: fig08\_20.c***  ***// Using function***  ***#include <stdio.h>***  ***#include <string.h>***  ***int main(void)***  ***{***  ***const char \*string = "This is a test";***  ***char character1 = 'a';***  ***char character2 = 'z';***  ***if (strchr(string, character1) != NULL) {***  ***printf("\'%c\' was found in \"%s\".\n",***  ***character1, string);***  ***}***  ***else {***  ***printf("\'%c\' was not found in \"%s\".\n",***  ***character1, string);***  ***}***  ***if (strchr(string, character2) != NULL) {***  ***printf("\'%c\' was found in \"%s\".\n",***  ***character2, string);***  ***}***  ***else {***  ***printf("\'%c\' was not found in \"%s\".\n",***  ***character2, string);***  ***}***  ***}*** |

|  |
| --- |
| ***Output*** |
| *../Screen%20Shot%202018-04-17%20at%2011.02.30%20PM.png* |

***Figure 8-21***

|  |
| --- |
| ***Commands*** |
| ***// Fig. 8.21: fig08\_21.c***  ***// Using function***  ***#include <stdio.h>***  ***#include <string.h>***  ***int main(void)***  ***{***  ***const char \*string1 = "The value is 3.14159";***  ***const char \*string2 = "1234567890";***  ***printf("%s%s\n%s%s\n\n%s\n%s%u\n",***  ***"string1 = ", string1, "string2 = ", string2,***  ***"The length of the inital segment of string1",***  ***"containing no characters from string2 = ",***  ***strcspn(string1, string2) );***  ***}*** |

|  |
| --- |
| ***Output*** |
| *../Screen%20Shot%202018-04-17%20at%2011.14.11%20PM.png* |

***Figure 8-22***

|  |
| --- |
| ***Commands*** |
| ***// Fig. 8.22: fig08\_22.c***  ***// Using function***  ***#include <stdio.h>***  ***#include <string.h>***  ***int main(void)***  ***{***  ***const char \*string1 = "This is a test";***  ***const char \*string2 = "beware";***  ***printf("%s\"%s\"\n'%c'%s\n\"%s\"\n",***  ***"Of the characters in ", string2,***  ***\*strpbrk(string1, string2) ,***  ***" appesrs earliest in ", string1);***  ***}*** |

|  |
| --- |
| ***Output*** |
| *../Screen%20Shot%202018-04-17%20at%2011.20.41%20PM.png* |

***Figure 8-23***

|  |
| --- |
| ***Commands*** |
| ***// Fig. 8.23: fig08\_23.c***  ***// Using function***  ***#include <stdio.h>***  ***#include <string.h>***  ***int main(void)***  ***{***  ***const char \*string1 = "A zoo has many animals including zebras";***  ***int c = 'z';***  ***printf("%s\n%s'%c'%s\"%s\"\n",***  ***"The remainder of string1 beginning with the",***  ***"last occurance of character ", c,***  ***" is:", strrchr(string1, c) );***  ***}*** |

|  |
| --- |
| ***Output*** |
| *../Screen%20Shot%202018-04-17%20at%2011.36.30%20PM.png* |

***Figure 8-24***

|  |
| --- |
| ***Commands*** |
| ***// Fig. 8.24: fig08\_24.c***  ***// Using function***  ***#include <stdio.h>***  ***#include <string.h>***  ***int main(void)***  ***{***  ***const char \*string1 = "The value is 3.14159";***  ***const char \*string2 = "aehi lsTuv";***  ***printf("%s%s\n%s%s\n\n%s\n%s%u\n",***  ***"string1 = ", string1, "string2 = ", string2,***  ***"The length of the inital segment of string1",***  ***"containing only characters from string2 = ",***  ***strspn(string1, string2) );***  ***}*** |

|  |
| --- |
| ***Output*** |
| *../Screen%20Shot%202018-04-17%20at%2011.49.32%20PM.png* |

***Figure 8-25***

|  |
| --- |
| ***Commands*** |
| ***// Fig. 8.25: fig08\_25.c***  ***// Using function***  ***#include <stdio.h>***  ***#include <string.h>***  ***int main(void)***  ***{***  ***const char \*string1 = "abcdefabcdef";***  ***const char \*string2 = "def";***  ***printf("%s%s\n%s%s\n\n%s\n%s%s\n",***  ***"string1 = ", string1, "string2 = ", string2,***  ***"The remainder of string1 beginning with the",***  ***"first occurance of string2 is:",***  ***strstr(string1, string2) );***  ***}*** |

|  |
| --- |
| ***Output*** |
| *../Screen%20Shot%202018-04-17%20at%2011.54.27%20PM.png* |

***Figure 8-26***

|  |
| --- |
| ***Commands*** |
| ***// Fig. 8.26: fig08\_26.c***  ***// Using function***  ***#include <stdio.h>***  ***#include <string.h>***  ***int main(void)***  ***{***  ***char string[] = "This is a sentence with 7 tokens";***  ***printf("%s\n%s\n\n%s\n",***  ***"The string to be tokenized is:", string,***  ***"The tokens are:");***  ***char \*tokenPtr = strtok(string, " ");***  ***while (tokenPtr != NULL) {***  ***printf("%s\n", tokenPtr);***  ***tokenPtr = strtok(NULL, " ");***  ***}***  ***}*** |

|  |
| --- |
| ***Output*** |
| *../Screen%20Shot%202018-04-17%20at%2011.58.46%20PM.png* |

***Figure 8-28***

|  |
| --- |
| ***Commands*** |
| ***// Fig. 8.28: fig08\_28.c***  ***// Using function***  ***#include <stdio.h>***  ***#include <string.h>***  ***int main(void)***  ***{***  ***char s1[17];***  ***char s2[] = "Copy this string";***  ***memcpy(s1, s2, 17);***  ***printf("%s\n%s\"%s\"\n",***  ***"After s2 is copied into s1 with memcpy,",***  ***"s2 contains ", s1);***  ***}*** |

|  |
| --- |
| ***Output*** |
| *../Screen%20Shot%202018-04-18%20at%2012.10.51%20AM.png* |

***Figure 8-29***

|  |
| --- |
| ***Commands*** |
| ***// Fig. 8.29: fig08\_29.c***  ***// Using function***  ***#include <stdio.h>***  ***#include <string.h>***  ***int main(void)***  ***{***  ***char x[] = "Home Sweet Home";***  ***printf("%s%s\n", "The string in array x before memmove is: ", x);***  ***printf("%s%s\n", "The string in array x after memmove is: ", x,***  ***(char \*) memmove(x, &x[5], 10));***  ***}*** |

|  |
| --- |
| ***Output*** |
| *../Screen%20Shot%202018-04-18%20at%2012.16.33%20AM.png* |

***Figure 8-30***

|  |
| --- |
| ***Commands*** |
| ***// Fig***  ***// Using function***  ***#include <stdio.h>***  ***#include <string.h>***  ***int main(void)***  ***{***  ***char s1[] = "ABCDEFG";***  ***char s2[] = "ABCDXYZ";***  ***printf("%s%s\n%s%s\n\n%s%2d\n%s%2d\n%s%2d\n",***  ***"s1 = ", s1, "s2 = ", s2,***  ***"memcmp(s1, s2, 4) = ", memcmp(s1, s2, 4),***  ***"memcmp(s1, s2, 7) = ", memcmp(s1, s2, 7),***  ***"memcmp(s2, s1, 7) = ", memcmp(s2, s1, 7));***  ***}*** |

|  |
| --- |
| ***Output*** |
| *../Screen%20Shot%202018-04-19%20at%208.47.20%20PM.png* |

***Figure 8-31***

|  |
| --- |
| ***Commands*** |
| ***// Fig***  ***// Using function***  ***#include <stdio.h>***  ***#include <string.h>***  ***int main(void)***  ***{***  ***const char \*s = "This is a string";***  ***printf("%s\'%c\'%s\"%s\"\n",***  ***"The remainder of s after character ", 'r',***  ***" is found is ", (char \*) memchr(s, 'r', 16));***  ***}*** |

|  |
| --- |
| ***Output*** |
| *../Screen%20Shot%202018-04-19%20at%208.51.38%20PM.png* |

***Figure 8-32***

|  |
| --- |
| ***Commands*** |
| ***// Fig***  ***// Using function***  ***#include <stdio.h>***  ***#include <string.h>***  ***int main(void)***  ***{***  ***char string1[15] = "BBBBBBBBBBBBBB";***  ***printf("string1 = %s\n", string1);***  ***printf("string1 after memset = %s\n",***  ***(char \*) memset(string1, 'b', 7));***  ***}*** |

|  |
| --- |
| ***Output*** |
| *../Screen%20Shot%202018-04-19%20at%208.56.19%20PM.png* |

***Figure 8-34***

|  |
| --- |
| ***Commands*** |
| ***// Fig***  ***// Using function***  ***#include <stdio.h>***  ***#include <string.h>***  ***int main(void)***  ***{***  ***printf("%s\n", strerror(2));***  ***}*** |

|  |
| --- |
| ***Output*** |
| *../Screen%20Shot%202018-04-19%20at%208.58.07%20PM.png* |

***Figure 8-35***

|  |
| --- |
| ***Commands*** |
| ***// Fig***  ***// Using function***  ***#include <stdio.h>***  ***#include <string.h>***  ***int main(void)***  ***{***  ***const char \*string1 = "abcdefghijklmnopqrstuvwxyz";***  ***const char \*string2 = "four";***  ***const char \*string3 = "Boston";***  ***printf("%s\"%s\"%s%u\n%s\"%s\"%s%u\n%s\"%s\"%s%u\n",***  ***"The length of ", string1, " is ", strlen(string1),***  ***"The length of ", string2, " is ", strlen(string2),***  ***"The length of ", string3, " is ", strlen(string3));***  ***}*** |

|  |
| --- |
| ***Output*** |
| *../Screen%20Shot%202018-04-19%20at%209.06.47%20PM.png* |

***Figure 8-32***

|  |
| --- |
| ***Commands*** |
| ***#include <stdio.h>***  ***int main(void)***  ***{***  ***char \*months[13] = { "", "January", "February", "March",***  ***"April", "May", "June", "July",***  ***"August", "September", "October",***  ***"November", "December"};***  ***int m;***  ***int d;***  ***int y;***  ***printf( "Enter a date in the form mm/dd/yyyy: ");***  ***scanf( "%d/%d/%d", &m, &d, &y );***  ***printf( "The date is: %s %d, %d\n", months[ m ], d, y);***  ***return 0;***  ***}*** |

|  |
| --- |
| ***Output*** |
| *../Screen%20Shot%202018-04-22%20at%207.29.29%20PM.png* |

***Figure 8-34***

|  |
| --- |
| ***Commands*** |
| ***#include <stdio.h>***  ***int main(void)***  ***{***  ***char \*digits[10] = { "", "ONE", "TWO", "THREE", "FOUR",***  ***"FIVE", "SIX", "SEVEN", "EIGHT", "NINE"};***  ***char \*teens[10] = { "TEN", "ELEVEN", "TWELVE", "THIRTEEN",***  ***"FOURTEEN", "FIFTEEN", "SIXTEEN",***  ***"SEVENTEEN", "EIGHTEEN", "NINETEEN"};***  ***char \*tens[10] = { "", "TEN", "TWENTY", "THIRTY", "FORTY",***  ***"FIFTY", "SIXTY", "SEVENTY", "EIGHTY",***  ***"NINETY"};***  ***int dollars;***  ***int cents;***  ***int digit1;***  ***int digit2;***  ***printf( "Enter the check amount (0.00 to 99.99): ");***  ***scanf( "%d.%d", &dollars, &cents);***  ***printf( "\nThe check amount in words is:\n");***  ***if (dollars < 10) {***  ***printf( "%s ", digits[dollars]);***  ***}***  ***else if (dollars < 20) {***  ***printf( "%s ", teens[dollars - 10]);***  ***}***  ***else {***  ***digit1 = dollars / 10;***  ***digit2 = dollars % 10;***  ***if (digit2 == 0) {***  ***printf( "%s ", tens[digit1]);***  ***}***  ***else {***  ***printf( "%s-%s ", tens[digit1], digits[digit2]);***  ***}***  ***}***  ***printf( "and %d/100\n", cents);***  ***return 0;***  ***}*** |

|  |
| --- |
| ***Output*** |
| *../Screen%20Shot%202018-04-22%20at%207.38.04%20PM.png* |