**Exercise for data type conversion**

1. Define a variable **num** with a value of 42.
2. Convert **num** to a string and assign it to a new variable called **str\_num** using the num2str function.
3. Display the value of **str\_num** using the disp function.
4. Convert **str\_num** back to a number using the str2num function and assign it to a new variable called **num2**.
5. Display the value of **num2** using the disp function.
6. Define a string variable called **name** with the value "Saman Kumara".
7. Convert **name** to a character array using the char function and assign it to a new variable called **char\_name**.
8. Display the value of **char\_name** using the disp function.
9. Convert **char\_name** back to a string using the string function and assign it to a new variable called **str\_name**.
10. Display the value of **str\_name** using the disp function.
11. Define a variable **int** with a value of 123.
12. Convert **int** to a string using the int2str function and assign it to a new variable called **str\_int**.
13. Display the value of **str\_int** using the disp function.
14. Convert **str\_int** to a double using the str2double function and assign it to a new variable called **double\_int**.
15. Display the value of **double\_int** using the disp function.

**Answers:**

% Data type conversion exercise

% Define a variable num with a value of 42

num = 42;

% Convert num to a string and assign it to str\_num

str\_num = num2str(num);

% Display the value of str\_num

disp(str\_num);

% Convert str\_num back to a number and assign it to num2

num2 = str2num(str\_num);

% Display the value of num2

disp(num2);

% Define a string variable name with the value "Saman Kumara"

name = "Saman Kumara";

% Convert name to a character array and assign it to char\_name

char\_name = char(name);

% Display the value of char\_name

disp(char\_name);

% Convert char\_name back to a string and assign it to str\_name

str\_name = string(char\_name);

% Display the value of str\_name

disp(str\_name);

% Define a variable int with a value of 123

int = 123;

% Convert int to a string and assign it to str\_int

str\_int = int2str(int);

% Display the value of str\_int

disp(str\_int);

% Convert str\_int to a double and assign it to double\_int

double\_int = str2double(str\_int);

% Display the value of double\_int

disp(double\_int);