```
/*
* HeeChan Kang
* CSC 431 - AI Robotics
* Assignment 2
* Dollar to Yen – Take in dollar spent and exchange rate and simply multiply.
*/

#include <stdio.h>
#include <stdlib.h>

/* Multiply dollars and exchange rate to get yen */
double exchange(double dollars, double exrate) {
	return dollars * exrate;
}

void main(void) {
	double dollars, exrate, yen;

	dollars = 2345.67;
	exrate = 100;

	yen = exchange(dollars, exrate);

	printf("$ %8.2lf at an exchange rate of %6.2lf equals %12.2lf yen\n",
	dollars, exrate, yen);
}
```

Output:

```
heechan@heech-laptop:~/Documents/Git/airobotics/Assignment2$ gcc money.c -o money
heechan@heech-laptop:~/Documents/Git/airobotics/Assignment2$ ./money
$  2345.67 at an exchange rate of 100.00 equals    234567.00 yen
heechan@heech-laptop:~/Documents/Git/airobotics/Assignment2$
```

```
/*
* HeeChan Kang
* CSC 431 - AI Robotics
* Assignment 2
* Dollar to Yen with User Input – Same as above but with user input.
*/

#include <stdio.h>
#include <stdlib.h>

/* Multiply dollars and exchange rate to get yen */
double exchange(double dollars, double exrate) {
	return dollars * exrate;
}

void main(void) {
	double dollars, exrate, yen;

	/* Take user input for dollar and exrate */
	printf("Please input dollar spent: ");
	scanf("%lf", &dollars);
	printf("Please input exchange rate: ");
	scanf("%lf", &exrate);

	yen = exchange(dollars, exrate);

	printf("$ %8.2lf at an exchange rate of %6.2lf equals %12.2lf yen\n",
	dollars, exrate, yen);
}
```

Output:

```
heechan@heech-laptop:~/Documents/Git/airobotics/Assignment2$ gcc money.c -o money
heechan@heech-laptop:~/Documents/Git/airobotics/Assignment2$ ./money
Please input dollar spent: 123
Please input exchange rate: 101.1
$   123.00 at an exchange rate of 101.10 equals     12435.30 yen
heechan@heech-laptop:~/Documents/Git/airobotics/Assignment2$
```

```
/*
* HeeChan Kang
* CSC 431 - AI Robotics
* Assignment 2
* Print Hundreds! - Using checkwriter.h given from assignment, utilize writeOnes
* and writeTens to fully writeHundreds.
*/

#include <stdio.h>
#include <stdlib.h>
#include "checkwriter.h"

/*
* writeHundreds takes an integer between zero and a thousand and prints out,
* with appropriate spaces, the English word for that number.
*/
void writeHundreds(int number) {
	int hundreds, tens;

	if (number < 100 && number > 0) {
		writeTens(number);
		printf("\n");
		return;
	}
	else if (number > 100 && number < 1000) {
		hundreds = number/100;
		writeOnes(hundreds);
		printf(" hundred and ");
		tens = number % 100;
		writeTens(tens);
		printf("\n");
	}
	else {
		printf("Invalid input.\n");
		return;
	}
}

void main(void) {
	int input;

	printf("Enter integer between 0 and 1000: ");
	scanf("%d", &input);

	writeHundreds(input);
}
```

Output:

```
heechan@heech-laptop:~/Documents/Git/airobotics/Assignment2$ gcc intToString.c -o
tToString
heechan@heech-laptop:~/Documents/Git/airobotics/Assignment2$ ./intToString
Enter integer between 0 and 1000: 5
five
heechan@heech-laptop:~/Documents/Git/airobotics/Assignment2$ ./intToString
Enter integer between 0 and 1000: 15
fifteen
heechan@heech-laptop:~/Documents/Git/airobotics/Assignment2$ ./intToString
Enter integer between 0 and 1000: 289
two hundred and eighty nine
heechan@heech-laptop:~/Documents/Git/airobotics/Assignment2$ ./intToString
Enter integer between 0 and 1000: 1000
Invalid input.
heechan@heech-laptop:~/Documents/Git/airobotics/Assignment2$
```

```
/*
* HeeChan Kang
* CSC 431 - AI Robotics
* Assignment 2
* Print Check! - Using printHundreds above, included appropriate spacing and other
* print outputs to make it look pretty.
*/

#include <stdio.h>
#include <stdlib.h>
#include "checkwriter.h"

/*
* writeHundreds takes an integer between zero and a thousand and prints out,
* with appropriate spaces, the English word for that number.
*/
void writeHundreds(int number) {
	int hundreds, tens;

	if (number < 100 && number > 0) {
		writeTens(number);
		return;
	}
	else if (number > 100 && number < 1000) {
		hundreds = number/100;
		writeOnes(hundreds);
		printf(" hundred and ");
		tens = number % 100;
		writeTens(tens);
	}
	else {
		printf("Invalid input.\n");
		return;
	}
}

void writeCheck(int number) {
	printf("\n-----------------------------------------------------------------
		--------\n\n");
	printf("HeeChan Kang\t\t\t\t\t\tCheck #123456\n");
	printf("Minneapolis\t\t\t\t\t\n");
	printf("Minnesota\t\tAugsburg Bank Visa\t January 30, 2018\n");
	printf("Pay to the order of: \t\t\t\t\t $ %d.00\n", number);
	writeHundreds(number);
	printf(" and 00/100 dollars\n\n");
	printf("CSC Department\n");
	printf("Hagfors Center\t\t\t\tSignature:_____\n");
```

```
	printf("\n--------------------------------------------------------------------
		-----\n\n");
}

void main(void) {
	int input;

	printf("Enter integer between 0 and 1000: ");
	scanf("%d", &input);

	writeCheck(input);
}
```

Output:

```
heechan@heech-laptop:~/Documents/Git/airobotics/Assignment2$ gcc intToString.c -o
intToString
heechan@heech-laptop:~/Documents/Git/airobotics/Assignment2$ ./intToString
Enter integer between 0 and 1000: 354

--------------------------------------------------------------------

HeeChan Kang                                          Check #123456
Minneapolis
Minnesota              Augsburg Bank Visa          January 30, 2018
Pay to the order of:                                      $ 354.00
three hundred and fifty four and 00/100 dollars

CSC Department
Hagfors Center                         Signature:

--------------------------------------------------------------------

heechan@heech-laptop:~/Documents/Git/airobotics/Assignment2$
```