

**CS215: Introduction to Program Design, Abstraction and Problem Solving
(Spring, 2023)**

**Programming Assignment 1
(100 points)**

Today's Date: Thursday, February 9

Due Date: Friday, February 24

(You should include your name and section number as part of the comments for your project assignment!!!)

The following are some sample outputs when you run your program:

(Note that **the blue part** represents the user input, and “**↵**” represents the enter/return key from user input.)

Sample output 1:

```
*****
*       The Super Bowl is the annual final playoff game       *
*       of the NFL to determine the league champion.          *
* The first Super Bowl took place on January 15, 1967.        *
* Super Bowl I (Los Angeles Memorial Coliseum) --> 1967       *
* This Roman Numerals Convertor is written by Yi Pike.        *
* If you had a time machine, which year of Super Bowl         *
* would you want to attend (1967 - 5965) ?                    *
*****
Please enter the year you want to attend (click Q or q to quit):
Q↵
Back to 2023, and have a great day!
```

Sample output 2:

```
*****
*       The Super Bowl is the annual final playoff game       *
*       of the NFL to determine the league champion.          *
* The first Super Bowl took place on January 15, 1967.        *
* Super Bowl I (Los Angeles Memorial Coliseum) --> 1967       *
* This Roman Numerals Convertor is written by Yi Pike.        *
* If you had a time machine, which year of Super Bowl         *
* would you want to attend (1967 - 5965) ?                    *
*****
Please enter the year you want to attend (click Q or q to quit):
Two Thousand and three↵
Please use four-digit number to represent a year (1967-5965)!
```

```
*****
*       The Super Bowl is the annual final playoff game       *
*       of the NFL to determine the league champion.          *
* The first Super Bowl took place on January 15, 1967.        *
* Super Bowl I (Los Angeles Memorial Coliseum) --> 1967       *
* This Roman Numerals Convertor is written by Yi Pike.        *
```

* If you had a time machine, which year of Super Bowl *
* would you want to attend (1967 - 5965) ? *

Please enter the year you want to attend (click Q or q to quit):
you mean 2023? ↵
Please use four-digit number to represent a year (1967-5965)!

* The Super Bowl is the annual final playoff game *
* of the NFL to determine the league champion. *
* The first Super Bowl took place on January 15, 1967. *
* Super Bowl I (Los Angeles Memorial Coliseum) --> 1967 *
* This Roman Numerals Convertor is written by Yi Pike. *
* If you had a time machine, which year of Super Bowl *
* would you want to attend (1967 - 5965) ? *

Please enter the year you want to attend (click Q or q to quit):
1966↵
The time machine will bring you to the year of 1966:
Wait!!! The year you enter is TOO EARLIER than the first Super
Bowl!

* The Super Bowl is the annual final playoff game *
* of the NFL to determine the league champion. *
* The first Super Bowl took place on January 15, 1967. *
* Super Bowl I (Los Angeles Memorial Coliseum) --> 1967 *
* This Roman Numerals Convertor is written by Yi Pike. *
* If you had a time machine, which year of Super Bowl *
* would you want to attend (1967 - 5965) ? *

Please enter the year you want to attend (click Q or q to quit):
-1978↵
The time machine will bring you to the year of -1978:
Wait!!! The year you enter is TOO EARLIER than the first Super
Bowl!

* The Super Bowl is the annual final playoff game *
* of the NFL to determine the league champion. *
* The first Super Bowl took place on January 15, 1967. *
* Super Bowl I (Los Angeles Memorial Coliseum) --> 1967 *
* This Roman Numerals Convertor is written by Yi Pike. *
* If you had a time machine, which year of Super Bowl *
* would you want to attend (1967 - 5965) ? *

Please enter the year you want to attend (click Q or q to quit):
1967 is ok? ↵
The time machine will bring you to the year of 1967:
It is Super Bowl I

We will help you find out the result and other interesting information...next time:)

```
*****
*       The Super Bowl is the annual final playoff game       *
*       of the NFL to determine the league champion.           *
* The first Super Bowl took place on January 15, 1967.         *
* Super Bowl I (Los Angeles Memorial Coliseum) --> 1967        *
* This Roman Numerals Convertor is written by Yi Pike.         *
* If you had a time machine, which year of Super Bowl          *
* would you want to attend (1967 - 5965) ?                      *
*****
Please enter the year you want to attend (click Q or q to quit):
2000 and later␣
The time machine will bring you to the year of 2000:
It is Super Bowl XXXIV
We will help you find out the result and other interesting
information...next time:)
```

```
*****
*       The Super Bowl is the annual final playoff game       *
*       of the NFL to determine the league champion.           *
* The first Super Bowl took place on January 15, 1967.         *
* Super Bowl I (Los Angeles Memorial Coliseum) --> 1967        *
* This Roman Numerals Convertor is written by Yi Pike.         *
* If you had a time machine, which year of Super Bowl          *
* would you want to attend (1967 - 5965) ?                      *
*****
Please enter the year you want to attend (click Q or q to quit):
2022.58 ok?␣
The time machine will bring you to the year of 2022:
It is Super Bowl LVI
We will help you find out the result and other interesting
information...next time:)
```

```
*****
*       The Super Bowl is the annual final playoff game       *
*       of the NFL to determine the league champion.           *
* The first Super Bowl took place on January 15, 1967.         *
* Super Bowl I (Los Angeles Memorial Coliseum) --> 1967        *
* This Roman Numerals Convertor is written by Yi Pike.         *
* If you had a time machine, which year of Super Bowl          *
* would you want to attend (1967 - 5965) ?                      *
*****
Please enter the year you want to attend (click Q or q to quit):
2026␣
The time machine will bring you to the year of 2026:
It is Super Bowl LX
```

We will help you find out the result and other interesting information...next time:)

```
*****
*       The Super Bowl is the annual final playoff game       *
*       of the NFL to determine the league champion.           *
* The first Super Bowl took place on January 15, 1967.         *
* Super Bowl I (Los Angeles Memorial Coliseum) --> 1967        *
* This Roman Numerals Convertor is written by Yi Pike.         *
* If you had a time machine, which year of Super Bowl          *
* would you want to attend (1967 - 5965) ?                     *
*****
Please enter the year you want to attend (click Q or q to quit):
3999↵
The time machine will bring you to the year of 3999:
It is Super Bowl MMXXXIII
We will help you find out the result and other interesting
information...next time:)
```

```
*****
*       The Super Bowl is the annual final playoff game       *
*       of the NFL to determine the league champion.           *
* The first Super Bowl took place on January 15, 1967.         *
* Super Bowl I (Los Angeles Memorial Coliseum) --> 1967        *
* This Roman Numerals Convertor is written by Yi Pike.         *
* If you had a time machine, which year of Super Bowl          *
* would you want to attend (1967 - 5965) ?                     *
*****
Please enter the year you want to attend (click Q or q to quit):
4000↵
The time machine will bring you to the year of 4000:
It is Super Bowl MMXXXIV
We will help you find out the result and other interesting
information...next time:)
```

```
*****
*       The Super Bowl is the annual final playoff game       *
*       of the NFL to determine the league champion.           *
* The first Super Bowl took place on January 15, 1967.         *
* Super Bowl I (Los Angeles Memorial Coliseum) --> 1967        *
* This Roman Numerals Convertor is written by Yi Pike.         *
* If you had a time machine, which year of Super Bowl          *
* would you want to attend (1967 - 5965) ?                     *
*****
Please enter the year you want to attend (click Q or q to quit):
5965↵
The time machine will bring you to the year of 5965:
It is Super Bowl MMMCMXCIX
```

We will help you find out the result and other interesting information...next time:)

```
*****
*       The Super Bowl is the annual final playoff game       *
*       of the NFL to determine the league champion.           *
* The first Super Bowl took place on January 15, 1967.         *
* Super Bowl I (Los Angeles Memorial Coliseum) --> 1967        *
* This Roman Numerals Convertor is written by Yi Pike.         *
* If you had a time machine, which year of Super Bowl          *
* would you want to attend (1967 - 5965) ?                     *
*****
Please enter the year you want to attend (click Q or q to quit):
5966↵
The time machine will bring you to the year of 5966:
Hold on!!! The year you enter is TOO BIG for Roman Numerals!
```

```
*****
*       The Super Bowl is the annual final playoff game       *
*       of the NFL to determine the league champion.           *
* The first Super Bowl took place on January 15, 1967.         *
* Super Bowl I (Los Angeles Memorial Coliseum) --> 1967        *
* This Roman Numerals Convertor is written by Yi Pike.         *
* If you had a time machine, which year of Super Bowl          *
* would you want to attend (1967 - 5965) ?                     *
*****
Please enter the year you want to attend (click Q or q to quit):
5964↵
The time machine will bring you to the year of 5964:
It is Super Bowl MMMCMXCVIII
We will help you find out the result and other interesting
information...next time:)
```

```
*****
*       The Super Bowl is the annual final playoff game       *
*       of the NFL to determine the league champion.           *
* The first Super Bowl took place on January 15, 1967.         *
* Super Bowl I (Los Angeles Memorial Coliseum) --> 1967        *
* This Roman Numerals Convertor is written by Yi Pike.         *
* If you had a time machine, which year of Super Bowl          *
* would you want to attend (1967 - 5965) ?                     *
*****
Please enter the year you want to attend (click Q or q to quit):
1973↵
The time machine will bring you to the year of 1973:
It is Super Bowl VII
We will help you find out the result and other interesting
information...next time:)
```

```
*****
*       The Super Bowl is the annual final playoff game       *
*       of the NFL to determine the league champion.           *
* The first Super Bowl took place on January 15, 1967.         *
* Super Bowl I (Los Angeles Memorial Coliseum) --> 1967        *
* This Roman Numerals Convertor is written by Yi Pike.         *
* If you had a time machine, which year of Super Bowl          *
* would you want to attend (1967 - 5965) ?                     *
*****
Please enter the year you want to attend (click Q or q to quit):
1985↵
The time machine will bring you to the year of 1985:
It is Super Bowl XIX
We will help you find out the result and other interesting
information...next time:)
```

```
*****
*       The Super Bowl is the annual final playoff game       *
*       of the NFL to determine the league champion.           *
* The first Super Bowl took place on January 15, 1967.         *
* Super Bowl I (Los Angeles Memorial Coliseum) --> 1967        *
* This Roman Numerals Convertor is written by Yi Pike.         *
* If you had a time machine, which year of Super Bowl          *
* would you want to attend (1967 - 5965) ?                     *
*****
Please enter the year you want to attend (click Q or q to quit):
1998↵
The time machine will bring you to the year of 1997:
It is Super Bowl XXXII
We will help you find out the result and other interesting
information...next time:)
```

```
*****
*       The Super Bowl is the annual final playoff game       *
*       of the NFL to determine the league champion.           *
* The first Super Bowl took place on January 15, 1967.         *
* Super Bowl I (Los Angeles Memorial Coliseum) --> 1967        *
* This Roman Numerals Convertor is written by Yi Pike.         *
* If you had a time machine, which year of Super Bowl          *
* would you want to attend (1967 - 5965) ?                     *
*****
Please enter the year you want to attend (click Q or q to quit):
2002↵
The time machine will bring you to the year of 2002:
It is Super Bowl XXXVI
We will help you find out the result and other interesting
information...next time:)
```

```
*****
*       The Super Bowl is the annual final playoff game       *
*       of the NFL to determine the league champion.           *
* The first Super Bowl took place on January 15, 1967.         *
* Super Bowl I (Los Angeles Memorial Coliseum) --> 1967        *
* This Roman Numerals Convertor is written by Yi Pike.         *
* If you had a time machine, which year of Super Bowl          *
* would you want to attend (1967 - 5965) ?                     *
*****
Please enter the year you want to attend (click Q or q to quit):
2019↵
The time machine will bring you to the year of 2019:
It is Super Bowl LIII
We will help you find out the result and other interesting
information...next time:)
```

```
*****
*       The Super Bowl is the annual final playoff game       *
*       of the NFL to determine the league champion.           *
* The first Super Bowl took place on January 15, 1967.         *
* Super Bowl I (Los Angeles Memorial Coliseum) --> 1967        *
* This Roman Numerals Convertor is written by Yi Pike.         *
* If you had a time machine, which year of Super Bowl          *
* would you want to attend (1967 - 5965) ?                     *
*****
Please enter the year you want to attend (click Q or q to quit):
2033↵
The time machine will bring you to the year of 2033:
It is Super Bowl LXVII
We will help you find out the result and other interesting
information...next time:)
```

```
*****
*       The Super Bowl is the annual final playoff game       *
*       of the NFL to determine the league champion.           *
* The first Super Bowl took place on January 15, 1967.         *
* Super Bowl I (Los Angeles Memorial Coliseum) --> 1967        *
* This Roman Numerals Convertor is written by Yi Pike.         *
* If you had a time machine, which year of Super Bowl          *
* would you want to attend (1967 - 5965) ?                     *
*****
Please enter the year you want to attend (click Q or q to quit):
2045↵
The time machine will bring you to the year of 2045:
It is Super Bowl LXXIX
We will help you find out the result and other interesting
information...next time:)
```

```
*****
*       The Super Bowl is the annual final playoff game       *
*       of the NFL to determine the league champion.           *
* The first Super Bowl took place on January 15, 1967.         *
* Super Bowl I (Los Angeles Memorial Coliseum) --> 1967        *
* This Roman Numerals Convertor is written by Yi Pike.         *
* If you had a time machine, which year of Super Bowl          *
* would you want to attend (1967 - 5965) ?                      *
*****
Please enter the year you want to attend (click Q or q to quit):
2057↵
The time machine will bring you to the year of 2057:
It is Super Bowl XCI
We will help you find out the result and other interesting
information...next time:)
```

```
*****
*       The Super Bowl is the annual final playoff game       *
*       of the NFL to determine the league champion.           *
* The first Super Bowl took place on January 15, 1967.         *
* Super Bowl I (Los Angeles Memorial Coliseum) --> 1967        *
* This Roman Numerals Convertor is written by Yi Pike.         *
* If you had a time machine, which year of Super Bowl          *
* would you want to attend (1967 - 5965) ?                      *
*****
Please enter the year you want to attend (click Q or q to quit):
2068↵
The time machine will bring you to the year of 2068:
It is Super Bowl CII
We will help you find out the result and other interesting
information...next time:)
```

```
*****
*       The Super Bowl is the annual final playoff game       *
*       of the NFL to determine the league champion.           *
* The first Super Bowl took place on January 15, 1967.         *
* Super Bowl I (Los Angeles Memorial Coliseum) --> 1967        *
* This Roman Numerals Convertor is written by Yi Pike.         *
* If you had a time machine, which year of Super Bowl          *
* would you want to attend (1967 - 5965) ?                      *
*****
Please enter the year you want to attend (click Q or q to quit):
2069↵
The time machine will bring you to the year of 2069:
It is Super Bowl CIII
We will help you find out the result and other interesting
information...next time:)
```



```
*****
*      The Super Bowl is the annual final playoff game      *
*      of the NFL to determine the league champion.          *
* The first Super Bowl took place on January 15, 1967.      *
* Super Bowl I (Los Angeles Memorial Coliseum) --> 1967     *
* This Roman Numerals Convertor is written by Yi Pike.      *
* If you had a time machine, which year of Super Bowl       *
* would you want to attend (1967 - 5965) ?                  *
*****
Please enter the year you want to attend (click Q or q to quit):
2070↵
The time machine will bring you to the year of 2070:
It is Super Bowl CIV
We will help you find out the result and other interesting
information...next time:)
```

```
*****
*      The Super Bowl is the annual final playoff game      *
*      of the NFL to determine the league champion.          *
* The first Super Bowl took place on January 15, 1967.      *
* Super Bowl I (Los Angeles Memorial Coliseum) --> 1967     *
* This Roman Numerals Convertor is written by Yi Pike.      *
* If you had a time machine, which year of Super Bowl       *
* would you want to attend (1967 - 5965) ?                  *
*****
Please enter the year you want to attend (click Q or q to quit):
q↵
Back to 2023, and have a great day!
```