

Lab-2

Write a class **Sequence** with

- Two **private** attributes *count* (int) and *data* (char[]).
- The class should have two constructors, one takes an int argument only, and the other takes an int and a char[] to initialize its member variables.
- The class should have a protected member function *setData* that takes a char[] argument and copies it into its member *data*.
- The class should have two public overloaded methods *print()* for printing the sequence, as described below:
 - One takes an integer argument which denotes the number of columns in the output
 - The other one does not take any parameter and prints the sequence in a line with tabs separating the characters
- The main function creates a Sequence with 'abcbdbabde' and
 - Prints flat
 - Prints with 3 columns
 - Prints with 4 columns

Write another class **PeriodicSequence** extending Sequence

- Two private members *period* (int) and *columns* (int)
- The constructor takes three arguments
 - One integer for period
 - One integer for columns
 - One char[] for characters in a row only
- This constructor internally calls **super** for initialization and initializes its own members also
- It has overridden the default *print()* function, and calls internally the appropriate print function of the base class
- The main function creates an instance of PeriodicSequence with 4(rows/periods), 5 columns and the column data is 'abcba'.
- It calls the
 - default *print()*
 - And *print(3)* as well