Class Activity 1.1: C++ Basics

In this activity, we will review basic C++ concepts including std::cout, literals, and identifiers.

Please fill in the roles for each member of your team. Take a look at the description of each role to see its responsibilities. In case there are only three people in the group, please assign the same person to the **Presenter** and **Reflector** role. It is a good idea to select roles that you have not recently taken.

Team name: _____ Date: _____

Role	Team Member Name
Manager. Makes sure team starts quickly and remain focused during the activity; takes care of time management; makes sure all voices in the team are heard	
Presenter. The only person in the team assigned to communicate questions and clarifications with the instructor or other teams; ensures all team members have had a chance to respond before asking outside sources; ensures that everyone in the team agrees on what to ask if an outside source is needed; presents conclusions of the team to the class, as requested.	
Reflector. Guides consensus-building process so that the team agrees on responses to questions; observes team dynamics and behavior with respect to the learning process; reports to the team periodically during the activity on how the team performs; possibly report to the entire class about how well the team is operating.	
Recorder. Records the names and roles of the group members at the beginning of each activity; records the important aspects of group discussions, observations, insights, etc.; the recorder's report is a log of the important concepts that the group has learned.	

1. What will be the output when you run the following program?

Code:

```
#include <iostream>
int main() {
  std::cout << "1. Red ";
  std::cout << "2. Green ";
  std::cout << "3. Blue ";
  return 0;
}
```

Output:

```
1. Red 2. Green 3. Blue
```

2. Why do we need the line: `#include <iostream>`?

Answer:

The command includes the iostream library that contains the implementation of various functions like std::cout and std::cin. We need them to use these functions.

3. Write code that will display the following output on the screen. (5 pts)

Output:

```
1. Red
2. Green
3. Blue
```

Code:

```
#include <iostream>
int main() {
  std::cout << "1. Red\n";
  std::cout << "2. Green\n";
  std::cout << "3. Blue\n";
  return 0;
}
```

4. Complete the program below so that it displays the following message on the screen (please include semicolons): "I'm here", John said.

Code:

```
#include <iostream>
int main() {
  // Provide code below
  std::cout << "\"I'm here\", John said.";
  return 0;
}
```

5. Identify the data type of the following literals. Choose from *character*, *integer*, *floating point*, and *string*.

Literal	**Data type**
`2018`	integer
`'A'`	character
`"2018"`	string
`"Hello? Who's there?"`	string
`"X"`	string
`'\''`	character
`2.718`	floating point

6. Identify whether the following identifiers are valid or invalid.

Identifier	**Valid/Invalid**
`total_sales`	valid
`totalSales`	valid
`total.sales`	invalid
`4thQtrSales`	invalid
`2.718`	invalid