What type would you choose for the following “numbers”?A person’s telephone number –String, because it can contain hyphens

A person’s height – store two int variables, one for feet and one for inchesA person’s age- intA person’s gender (Male, Female, Prefer Not To Answer) – int, 0 for male,1 for female and 2 for Prefer Not To Answer

A person’s salary- intA book’s ISBN - string

A book’s price - intA book’s shipping weight- intA country’s population - longThe number of stars in the universe- BigInteger

The number of employees in each of the small or medium businesses in theUnited Kingdom (up to about 50,000 employees per business)- int2. What are the difference between value type and reference type variables?

Reference type store references to their data while value type directly contain the value.

With reference types, we can have a situation where two variables reference same data. This is impossible in value type as only a copy of the value is passed.

3. What happens when you divide an int variable by 0? We get a compile error --- CS0020: Division by constant zero (in Solution.cs)

4. What happens when you divide a double variable by 0?it results in positive infinity.

5. What happens when you overflow an int variable, that is, set it to a value beyond itsrange?

It overflows and causes the value to become negative.

6. What is the difference between x = y++; and x = ++y;?

++Y is the prefix increment which returns the value of a variable after it has been incremented by 1.

Y++ is postfix increment which returns the value of a variable before it has been incremented by 1.

7. What is the difference between break, continue, and return when used inside a loopstatement?break terminates the closest enclosing iteration statement (for example: for, while loops).

continue starts a new iteration of the closing iteration statement.

return terminates the iteration and the method in which it's called in and returns a value to the calling function. If it is used without any expression it will simply terminate the function in which it is called in.

8. What are the three parts of a for statement and which of them are required?

3 sections for(initializer;condition;iterator)

**Initializer -**  Usually used to initialize a loop variable that is used in the condition

**Condition –** A boolean expression which evaluates to true/false

**Iterator -**  used to increment or decrement the loop variable

All the three sections are optional in for loop, having none will result in an infinite for loop.