

Sample Program 3.1

Average Age

Problem statement. Write five different versions of a program to average three ages and output the results to the console with a label. Each version should use a different sequence to total the three ages.

Solution #1.

```
public class AverageAgeVersion1
{
    public static void main(String[] args) throws Exception
    {
        int age1 = 19;
        int age2 = 21;
        int age3 = 30;
        int averageAge;

        averageAge = age1 + age2;
        averageAge = averageAge + age3;
        averageAge = averageAge / 3;

        System.out.println("The average of three ages is " + averageAge);
    }
}
```

Solution #2.

```
public class AverageAgeVersion2
{
    public static void main(String[] args) throws Exception
    {
        int age1 = 19;
        int age2 = 21;
        int age3 = 30;
        int averageAge;

        averageAge = age1 + age2 + age3;
        averageAge = averageAge / 3;

        System.out.println("The average of three ages is " + averageAge);
    }
}
```

Solution #3.

```
public class AverageAgeVersion3
{
    public static void main(String[] args) throws Exception
    {
        int age1 = 19;
        int age2 = 21;
        int age3 = 30;
        int averageAge;

        averageAge = (age1 + age2 + age3) / 3;

        System.out.println("The average of three ages is " + averageAge);
    }
}
```

Solution #4.

```
public class AverageAgeVersion4
{
    public static void main(String[] args) throws Exception
    {
        int age1 = 19;
        int age2 = 21;
        int age3 = 30;
        int averageAge = (age1 + age2 + age3) / 3;

        System.out.println("The average of three ages is " + averageAge);
    }
}
```

Solution #5.

```
public class AverageAgeVersion5
{
    public static void main(String[] args) throws Exception
    {
        int age1 = 19;
        int age2 = 21;
        int age3 = 30;

        System.out.print("The average of three ages is ");
        System.out.println((age1 + age2 + age3) / 3);
    }
}
```