**EXCEL FILE TWO**

**PART I**

1. **Correlation between number of courses and marks**

A correlation coefficient of approximately 0.417 indicates a positive linear relationship between the number of courses and student marks. The positive sign of the correlation coefficient suggests that as the number of courses a student takes increases, their marks tend to increase as well. In other words, there is a tendency for students who enroll in more courses to have higher marks.

The value of the correlation coefficient, 0.417, provides information about the strength of the relationship. A value closer to 1 indicates a stronger positive relationship. In this case, 0.417 suggests a moderate or somewhat weak positive relationship. It's not a very strong correlation, but it's still a noteworthy relationship.

1. **Correlation between time of study and marks**
2. A correlation coefficient of approximately 0.942 suggests a very strong and positive linear relationship between the time of study and student marks. A correlation coefficient close to 1 (0.942) indicates a very strong positive relationship between the time of study and student marks. In this context, as the time of study increases, student marks tend to increase as well. This suggests that students who spend more time studying tend to achieve higher marks.

The high correlation coefficient of 0.942 specifically suggests a strong linear relationship. When you plot the data points on a scatterplot, they closely follow a linear trend. This means that as the time of study increases, student marks increase in a consistent and linear manner.

**PART II**

**Hint: the Regression Equation is  marks y(marks) = m1x1(time\_study) + m2x2(number\_of\_courses)**

**m1(coefficient of time\_study) = 5.399178787**

**m2(coefficient of number\_of\_courses) = 1.864050743**

**x1 = time\_study**

**x2 = number\_of\_courses**

**y = m1x1 + m2x2**