Abstract: First of all, the more developed a country's higher study infrastructure, the better the country because higher educated peoples are played an important role in building a civilized society and a developed nation, so Almost all the countries are trying to increase the quality of their higher education day by day. Bangladesh has also taken some initiative to improve its higher study infrastructure. Recently, the number of foreign students in Bangladesh has increased significantly even though it is not excessive, but it has increased compared to the previous decade. In this paper, we have analyzed foreign students' academic and lifestyle data to identify which matters are making the major impact to make a decision whether a student will come to Bangladesh or not for his higher study, and we have analyzed that how suitable Bangladesh is for taking higher study. In addition to that, we have analyzed that after providing all facility, is the current foreign students satisfied or dissatisfied. For the case of foreign students, we have collected data from 399 present international students in Bangladesh. we have used some popular classification algorithms such as support vector machine, KNN, ANN, Random Forest. We also present a comparison of used machine learning algorithms over different evaluation metrics. After all, we have analyzed the data to show which factors play a major role in students' decision making.

Introduction: To begin with, in order to develop oneself as a skilled human resource, a student must take higher education, because through higher education he can increase his skills and knowledge. As a matter of fact, those who study abroad are far ahead of the general public in terms of independence, self-reliance, intelligence and creative ability. Additionally, As leaving their family and living alone in a foreign country, they are self-reliant and skilled in solving problems, and they are not lacking in any challenging task. For example, by staying abroad, a student will become aware of the politics, culture, customs of that country. In addition, he will have a different view of the world, and Learn about the world's political issues Being abroad, he has to learn the language of that country, which will add another pastor to the crown of his experience. To sum up higher education abroad will not only improve the educational qualifications and values of a student, but also increase his professional skills.

The better the education system of a country, the better the education and economic index of that country [18]. Because, higher education is very important for the formation of a civilized nation and the national economy. Civilized society has been relying on higher education institutions for many centuries to create leaders in various professions. The scope of higher education is expanding over time and will continue. There has been remarkable progress in various sectors (business, commerce, industry, and communication) centered on the higher educated people. That's why higher education institutions must be aware of the quality of education provided in these areas. Therefore, higher education in the modern world must be developed in many special disciplines and it should be suitable for a large number of students. For instance, Singapore, Japan, South Korea, Malaysia they have significantly improved their higher education system compared to last century. In addition to that, these countries have not improved their higher education overnight. Some have improved socio-economically, and some have planned, and some have increased research funding, and some have reduced corruption in that country. For

instance, after getting independent, the Malaysian economy had agricultural-based from 1960 to 1980, and after that from 1980 to 2000 Malaysian government had significantly developed their industry, and then those industries required skilled and higher educated employees, and then the Malaysian government invested more money in research and development sectors (R & D). To improve the higher education system from 2000 to current, the Malaysian government divided into five-phase, phase 1 to phase 5. Phase 1(2007-2010): Laying the Foundation, phase 2(2011-2015): strengthen and enhance, phase 3 (2016-2020): excellence, and phase 4 (beyond 2020): glory and sustainability [19]. Moreover, some country offers higher education free for all (such as Germany, Norway, Sweden, Austria, Finland, Czech Republic, France, Belgium, Greece, Spain, etc.) so that students can pay full attention to their study [20].

Bangladesh also had a very good higher education system post-independence. In those countries we have discussed above, a lot of students came to study in Bangladesh, but due to decades of political instability, the comparative development of higher education in Bangladesh has been relatively low. Before 1991 there had only eight public universities in Bangladesh. In spite of having the knowledge, there had no opportunity to seek higher study for the limited number of sits. Therefore, the government of Bangladesh took the initiative to set up public universities as well as private universities so that Bangladeshi students can get higher education in the country. After 1991, the private university of Bangladesh started its journey. At present, 42 public universities and 109 private universities in Bangladesh have confirmed the quality of their higher education (UGC report 2018). Currently, these universities are studying with Bangladeshi students as well as foreign students (especially South Asia, Africa). Although many people are coming to Bangladesh for higher education in the current decade, the Bangladeshi higher education system needs to be improved more. We created a questionnaire with the improvements that need to be made, and by collecting the data from the questions of the questionnaire, we have found out with that data how happy and unhappy those who are coming to our country for higher education are. The structure of the paper is organized as follows.

In section 2 there has been discussed related work. In section 3 there has been shown the data distribution. In section 4 there has been shown the Methodology. In section 5 there has been discussed the result and analysis. In section 6 there has been shown conclusion and references of the paper.

Related Work: The process of internationalization in higher education is progressing steadily [16]. George V. Coelho at all [1]. In their research, they described the main factors that put foreign students at risk in higher education as a result of the transfer of new cultures and environments. They Mentioned Many complications arise when young people migrate abroad for higher education as they become acquainted with new cultures and environments. So, they have to adapt to that environment as soon as possible to overcome this complication. They highlighted a life cycle of the students and they said that child's first school experience, the junior school transition, the transition from high school to college, graduate student stress, etc. Education overseas may be a major developmental and psychosocial move in a foreign student's life. Like

other moves, it represents an arrangement of stages of high-risk situations that deliver emotional push as well as openings for adapting behavior.

C. D. Throsby at all [2]. They have shown in their research how foreign students play an important role in the economic development of the host country. They described both direct and indirect costs-benefit. They have mentioned tuition fee, accommodation, meals and the costs of any additional services provided, such as special counselling, or host country language courses as a direct benefit. for the indirect benefit, they point out that local students can become acquainted with a wide variety of cultures, and that foreign students take the research sector further by participating in research. Similar to these benefits There are some possible parallel costs such as enmity from local students, unpleasant reaction by foreign students to the host institution, etc.). There have been a few endeavors to measure the total benefits and costs of foreign students in host countries (for example, Reubens 1975[3]; Blaug 1981[4]; Jenkins 1983[5]; Winkler 1983[6]; Chishti 1984[7]; Fry 1984[8]; Manning et al.

Every country follows some foreign policy for foreign student. According to [9] Prior to 1986, about 45 to 60 per cent of foreign students in Australia were studying on scholarships. As a result, the Australian government had to pay a large subsidy every year. In 1986, the government of Australia issued a proclamation to all educational institutions in their country, asking all educational institutions to declare their course as fully paid for foreign students. As a result of the Australian Government's decision, students from many developing countries, despite their qualifications, were barred from pursuing higher education in Australia. To address this problem, the Australian government introduced the Merit Scholarship in 1990. Within 4 years of this rule, the number of foreign students in Australia increased from 24,000 to 55,000, of which 30,000 were fully paid.

Nowadays machine learning algorithms have become very popular in research. At present machine learning techniques are being used to solve other problems as well as the problems of educational institutions such as institutions, teacher quality (Góes et al. 2014[10]" Education quality measured by the classification of school performance using quality labels". Xiao-YanLiu 2015[11]" Private colleges teachers evaluation system based on support vector machine (SVM)."), examination and assessments (Muklason et al. 2017[12]") Fairness in examination timetabling: student preferences and extended formulations."), measure practices impact (Delen et al. 2013[13]" A comparative analysis of machine learning systems for measuring the impact of knowledge management practices"), learning product selection (Alptekin and Ertugrul 2010[14]" An integrated decision framework for evaluating and selecting e-learning products"; Oztekin et al. 2013[15]" A Machine learning-based usability evaluation method for eLearning systems."), course planning (Abdahllah 2015[16]" A decision support model for long-term course planning") and more.

According to Acharya A, Sinha D (2014) [17]at all. Developed a model using machine learning to predict student's performance. They have mentioned the academic performance of students depends on previous academic records, economic status, family background, performance in mid semester examination. Based on these factors they apply Decision Tree (DT). Bayesian Networks (BN), Artificial Neural Networks (ANN), Support Vector Machines (SVM).

Tan M, Shao P (2015) by using Artificial Neural Network (ANN), Decision Tree (DT) and Bayesian Networks (BNs) developed a model to predict the dropout of student in eLearning program.

Although some of these studies addressed educational problem issues at the higher education level, none have considered the satisfaction and dissatisfaction on host country. While previous research focuses on prediction, the most commonly used algorithms are artificial neural networks and support vector machines.

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