**Task 2**

**Neural Network and Deep Learning**

**Team ID: SC\_H17**

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| **ID** | **Name** |
| 20191700785 | يوسف محمد جمعه محمد |
| 20191700606 | محمود محمد احمد عمران |
| 20191700620 | مروان محمد عبد الحليم السيد |
| 20191700460 | كيرلس نبيل منير فهمي |
| 20191700274 | ساره عادل الجبالي محمد |

* **30 Combinations of 2 features for 2 classes**

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| 1. **X1 & X2 (Adelie - Gentoo), Acc = 97.5%** | 1. **X1 & X2 (Adelie - Chinstrap), Acc = 97.5%** |
| 1. **X1 & X2 (Gentoo - Chinstrap), Acc = 97.5%** | 1. **X1 & X3 (Adelie - Gentoo), Accuracy = 67.5%** |
| 1. **X1 & X3 (Adelie - Chinstrap), Acc = 72.5%** | 1. **X1 & X3 (Gentoo - Chinstrap), Acc = 90%** |

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| 1. **X1 & X4 (Adelie - Gentoo), Acc = 57.5%** | 1. **X1 & X4 (Adelie - Chinstrap), Acc = 67.5%** |
| 1. **X1 & X4 (Gentoo - Chinstrap), Acc = 50%** | 1. **X1 & X5 (Adelie - Gentoo), Acc = 62.5%** |
| 1. **X1 & X5 (Adelie - Chinstrap), Acc = 82.5%** | 1. **X1 & X5 (Gentoo - Chinstrap), Acc = 97.5%** |

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| 1. **X2 & X3 (Adelie - Gentoo), Acc = 100%** | 1. **X2 & X3 (Adelie - Chinstrap), Acc = 77.5%** |
| 1. **X2 & X3 (Gentoo - Chinstrap), Acc = 100%** | 1. **X2 & X4 (Adelie - Gentoo), Acc = 55%** |
| 1. **X2 & X4 (Adelie - Chinstrap), Acc = 50%** | 1. **X2 & X4 (Gentoo - Chinstrap), Acc = 50%** |
| 1. **X2 & X5 (Adelie - Gentoo), Acc = 100%** |

* **Conclusion:**

**The highest accuracy achieved is 100% by features:**

* + **X2 & X3 (Adelie – Gentoo) & (Gentoo – Chinstrap)**
  + **X2 & X5 (Adelie – Gentoo)**