MACHINE LEARNING 1. A 2. B 3. B 4. A 5. C 6. B 7. B 8. A 9. A 10.A 11.B 12.D 13. Regularization refers to techniques that are used to calibrate machine learning models in order to minimize the adjusted loss function and prevent overfitting or underfitting. 14. Differrent Regularization algorithms area. Ridge regression b. Lasso c. Elastic -Net regression

15.A linear regression models is used to find the best fit linear line and the optimal values of intercept and co-efficient such that the error is minimized. Error is the difference between the

actual value and predictive value and the goal is to reduce this difference.

```
14. def pythagoras(opposite_side,adjacent_side,hypotenuse):
    if opposite_side == str("x"):
      return ("Opposite = " + str(((hypotenuse**2) - (adjacent_side**2))**0.5))
    elif adjacent_side == str("x"):
      return ("Adjacent = " + str(((hypotenuse**2) - (opposite_side**2))**0.5))
    elif hypotenuse == str("x"):
      return ("Hypotenuse = " + str(((opposite_side**2) + (adjacent_side**2))**0.5))
    else:
      return "You know the answer!"
print(pythagoras(3,4,'x'))
print(pythagoras(3,'x',5))
print(pythagoras('x',4,5))
print(pythagoras(3,4,5))
15. from collections import Counter
  counts=Counter(word) # Counter({'I': 2, 'H': 1, 'e': 1, 'o': 1})
    for i in word:
    print(i,counts[i])
```