11)Write a r program to create any application of Linear Regression in multivariate context for predictive purpose.

```
house_size = c(500, 1000, 1500, 2000, 2500)
house_price = c(50, 100, 150, 200, 250)

data = data.frame(house_size, house_price)

print(data)

plot(data$house_size, data$house_price,
    main = "U15IG2250059: House size vs House Price",
    xlab = "House size in SQ.FT",
    ylab = "House price in thousands",
    pch = 16, col = "blue")

model = lm(house_price ~ house_size, data = data)

abline(model, col = "red", lwd = 2)

summary(model)

new_data = data.frame(house_size = 3000)
predicted_price = predict(model, newdata = new_data)

print(predicted_price)
```