

## WEEK 7: CLASSIFICATION MODEL

### PROBLEM DEFINATION:

Apply multiple regressions, if data have a continuous independent variable. Apply on above dataset.

### SOURCE CODE:

```
>mydata$rank<-factor(mydata$rank)
>mylogit<-
glm(admit~gre+gpa+rank,data=mydata,family="binomial")
>summary(mylogit) OUTPUT:
```

```
> mydata$rank <- factor(mydata$rank)
> mylogit <- glm(admit ~ gre + gpa + rank, data = mydata, family = "binomial")
> summary(mylogit)

Call:
glm(formula = admit ~ gre + gpa + rank, family = "binomial",
    data = mydata)

Deviance Residuals:
    Min       1Q   Median       3Q      Max
-1.6268  -0.8662  -0.6388   1.1490   2.0790

Coefficients:
              Estimate Std. Error z value Pr(>|z|)
(Intercept) -3.989979    1.139951  -3.500  0.000465 ***
gre           0.002264    0.001094   2.070  0.038465 *
gpa           0.804038    0.331819   2.423  0.015388 *
rank2        -0.675443    0.316490  -2.134  0.032829 *
rank3        -1.340204    0.345306  -3.881  0.000104 ***
rank4        -1.551464    0.417832  -3.713  0.000205 ***
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

(Dispersion parameter for binomial family taken to be 1)

    Null deviance: 499.98  on 399  degrees of freedom
Residual deviance: 458.52  on 394  degrees of freedom
AIC: 470.52

Number of Fisher Scoring iterations: 4
```