```
import math

data = [
 ([25000,1,0],0), ([40000,0,1],0), ([50000,1,1],1),
 ([60000,0,1],1), ([75000,1,1],1), ([30000,0,0],0)
]

def mean(l): return sum(l)/len(l)
def var(l):
    m=mean(l)
    return sum((x-m)**2 for x in l)/len(l) + 1e-6

def gaussian(x,m,v):
    return (1/math.sqrt(2*math.pi*v))*math.exp(-(x-m)**2/(2*v))

cls={0:[],1:[]}
for x,y in data: cls[y].append(x)

stats={c:[(mean(f),var(f)) for f in zip(*v)] for c,v in cls.items()}

def predict(x):
    probs={}
    for c in stats:
        probs[c]=1
        for i,(m,v) in enumerate(stats[c]):
            probs[c]*=gaussian(x[i],m,v)
    return max(probs,key=probs.get)

test=[55000,1,1]
print("Predicted Loan Status:", predict(test))
```

OUTPUT:

```
>>>
========== RESTART: C:/Users/prast/OneDrive/Desktop/ML LAB/EXP 19.py ==========
Predicted Loan Status: 1
>>>
```