GTU CSE 241 / 501 Quiz

Std Code: 220

 Std Number:
 2 | 1 | 0 | 1 | 0 | 4 | 0 | 0 | 4 | 0 | 3 | 9 | |

```
double netArea(const vector<Shape*>& v){
    if (v.size() <= 0)
        return 0;
    int areaSquare = 0;
    int areaShape = 0;
    for (const auto shape: v) {
        if (shape->gettype() == "square")
            areaSquare += shape->area();
        else
            areaShape += shape->area();
    }
    return (areaSquare - areaShape);
}
```

```
int main() {
    int netA;
    vector< Shape * > v(6);
    v[0] = new Circle(4);
    v[1] = new Rectangle(3,5);
    v[2] = new Square(5);
    v[3] = new Square(6);
    v[4] = new Circle(3);
    v[5] = new Rectangle(7,8);

    netA = netArea(v);
    std::cout << netA << std::endl;
    for (auto shape: v) //no leaks
        delete shape;
    return (0);
}</pre>
```