

Advanced Lambda Example

Here's a more sophisticated lambda that performs statistical analysis:

```
def statistical_analysis_lambda(context, voxel_reader, voxel_writer):
    grades = []
    volumes = []
    for voxel in voxel_reader:
        grade = voxel.properties.get('grade',0.0)
        if grade > 0: # Only include non-zero grades
            grades.append(grade)
            volumes.append(voxel.size)
    if not grades:
        return {'error':'No valid grade values found'}

    # Calculate statistics
    total_volume = sum(volumes)
    weighted_average_grade = sum(g * v for g, v in zip(grades, volumes)) / total_volume

    return {
        'total_volume': total_volume,
        'voxel_count':len(grades),
        'average_grade':sum(grades) / len(grades),
        'weighted_average_grade': weighted_average_grade,
        'min_grade': min(grades),
        'max_grade': max(grades)
    }
```

Revision #1

Created 21 October 2025 17:48:51 by admin

Updated 21 October 2025 17:54:47 by admin