```
# Python device function
def add_one(value):
    return value + 1
```

①

```
Nvidia PTX
```

②

```
Object File with
Relocatable Device Code
```

③

```
Executable library of
device functions
```

```
# extern declaration (eventually from python source)
extern "C" __device__ int add_one(int value);

__global__ void increment_kernel(int *array, int size) {
    int count = gridDim.x * blockDim.x;
    int tid = blockIdx.x * blockDim.x + threadIdx.x;
    for (int i=tid(); i<size; i+=count) {
        array[i] = add_one(array[i]);
    }
}
```

④

```
Executable shared object
library
```