

1 AVX zapiski

Avx slang:

- upper half: 127-255
- lower half: 0-127

1.1 Printing avx register

One can print avx register like this:

```
_m256d reg=_mm256_set_pd(1,2,3,4); // sets reg[255-192]=1 and reg[0-63]=4
double *p = (double*)&reg
std::cout << p[0]<<' ' << p[1]<<' ' << p[2]<<' ' << p[3] << std::endl;
double arr[4];
_mm_storeu_pd(arr, reg);
std::cout << arr[0]<<' '<< arr[1]<<' '<< arr[2]<<' '<< arr[3] << std::endl;
```

This will print 1 2 3 4. Thus, it starts at 0 -> at the lower part of register! The same happens in the second case - where we print array called *arr*