Memory Layout of a C Program


```c
#include <stdio.h>
#include <stdlib.h>

int x;
int y = 15;


int main(int argc, char *argv[])
{
    int *values;
    int i;


    values = (int *)malloc(sizeof(int)*5);

    for(i = 0; i < 5; i++)
        values[i] = i;

    return 0;
}
```

Memory layout diagram (high memory to low memory): argc, agrv / stack / heap / uninitialized data / initialized data / text