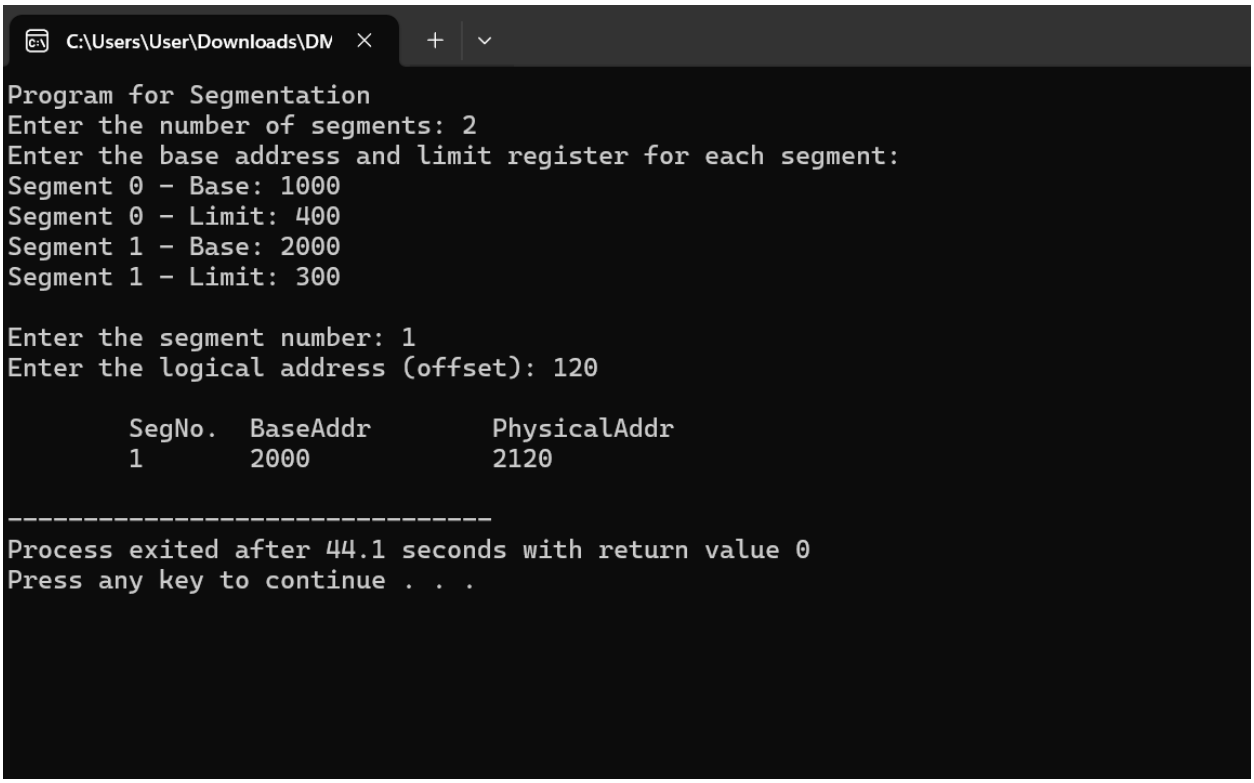
Lab11

```
#include <stdio.h>
#include <stdlib.h> // for exit()

int main() {
   int b[20], l[20], n, i, pa, s, a, d;

   printf("Program for Segmentation\n");

   printf("Enter the number of segments: ");
   scanf("%d", &n);

   printf("Enter the base address and limit register for each segment:\n");
   for (i = 0; i < n; i++) {
      printf("Segment %d - Base: ", i);
      scanf("%d", &b[i]);
      printf("Segment %d - Limit: ", i);
      scanf("%d", &l[i]);
   }

   printf("\nEnter the segment number: ");
   scanf("%d", &s);

   if (s >= n) {
      printf("Invalid segment number\n");
      exit(0);
   }

   printf("Enter the logical address (offset): ");
   scanf("%d", &d);

   if (d < l[s]) {
      pa = b[s] + d;
      a = b[s];
      printf("\n\tSegNo.\tBaseAddr\tPhysicalAddr\n");
      printf("\t%d\t%d\t\t%d\n", s, a, pa);
   } else {
      printf("\nOffset exceeds the limit of the segment\n");
   }

   return 0;
}
```


C:\Users\User\Downloads\DM
Program for Segmentation
Enter the number of segments: 2
Enter the base address and limit register for each segment:
Segment 0 - Base: 1000
Segment 0 - Limit: 400
Segment 1 - Base: 2000
Segment 1 - Limit: 300
Enter the segment number: 1
Enter the logical address (offset): 120
SegNo. BaseAddr PhysicalAddr
1 2000 2120
Process exited after 44.1 seconds with return value 0
Press any key to continue . . .