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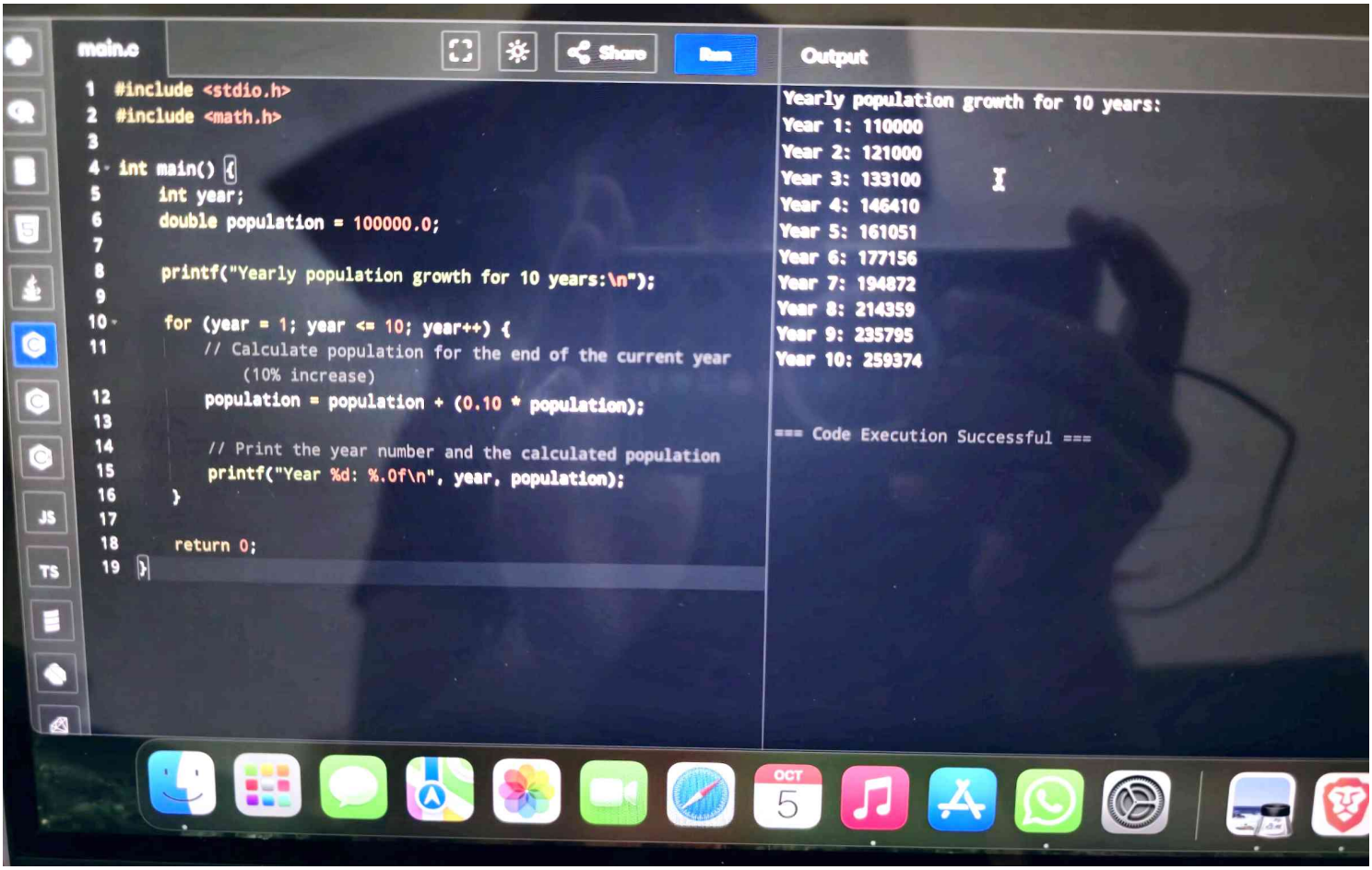
Q.4 The population of a town is 100000. The population has increased steadily at the rate of 10% per year for the last 10 years. Write a program to determine the population at the end of each year in the last decade.

```
#include <stdio.h>
#include <math.h>

int main() {
    int year;
    double population = 100000;

printf("Yearly population growth for 10 years :\n");

for(year = 1; year <= 10; year++) {
    population = population + (0.10 * population);
    printf("Year %d: %f\n", year, population);
}

return 0;
}
```

Remarks:

Teacher's Signature_____


main.c
Share
Run
Output
#include <stdio.h>
#include <math.h>
int main() {
int year;
double population = 100000.0;
printf("Yearly population growth for 10 years:\n");
for (year = 1; year <= 10; year++) {
// Calculate population for the end of the current year (10% increase)
population = population + (0.10 * population);
// Print the year number and the calculated population
printf("Year %d: %.0f\n", year, population);
}
return 0;
}
Yearly population growth for 10 years:
Year 1: 110000
Year 2: 121000
Year 3: 133100
Year 4: 146410
Year 5: 161051
Year 6: 177156
Year 7: 194872
Year 8: 214359
Year 9: 235795
Year 10: 259374
=== Code Execution Successful ===