

The image shows a Mac OS X desktop environment with a terminal window open. The terminal window has a dark background and displays a C program for generating prime numbers between two user-specified values. The code includes a function to check if a number is prime and a loop to print all prime numbers between the start and end values.

```
#include <stdio.h>

int ISPRIME(int num) {
    if (num <= 1)
        return 0;
    for (int i = 2; i <= num / 2; i++) {
        if (num % i == 0)
            return 0;
    }
    return 1;
}

int main() {
    int start, end;
    printf("---- Prime Number Generator ----\n");
    printf("Enter starting number: ");
    scanf("%d", &start);
    printf("Enter ending number: ");
    scanf("%d", &end);

    printf("\nPrime numbers between %d and %d are:\n", start, end);
    for (int i = start; i <= end; i++) {
        if (ISPRIME(i))
            printf("%d ", i);
    }
}
```

The terminal window also shows the output of the program when run from the command line:

```
abhaygupta@192 main.c % gcc main.c
abhaygupta@192 main.c % ./a.out
---- Prime Number Generator ----
Enter starting number: 3
Enter ending number: 9

Prime numbers between 3 and 9 are:
3 5 7
```

Experiment 6.4

#include <stdio.h>

6.4 int ISPRIME (int num) {
if (num == 1)
return 0;for (int i = 2; i <= num / 2; i++) {
if (num % i == 0)
return 0;

}

return 1;

}

int main () {

int start, end;

printf ("----Prime Number Generator ----\n");

printf ("Enter starting number : ");

scanf ("%d", &start);

printf ("Enter ending number : ");

scanf ("%d", &end);

printf ("\n Prime numbers between %d and %d are :\n", start, end);

for (int i = start; i <= end; i++) {

if (ISPRIME (i))

printf ("%d", i);

}

printf ("\n");

return 0;

Teacher's Signature _____