4. Develop a C function ISPRIME (num) that accepts an integer argument and returns 1 if the argument is prime, a 0 otherwise. Write a C program that invokes this function to generate prime numbers between the given ranges.

```
#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 ("Enter the starting number: ");
 scanf ("%d", &start);
 printf ("Enter the ending number: ");
 scanf ("%d", &end);
 printf ("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;
}
```

C exp6isprime.c > ...

```c
#include <stdio.h>

// Function to check if a number is prime
int ISPRIME(int num) {
    if (num <= 1)
        return 0; // Not prime
    for (int i = 2; i <= num / 2; i++) {
        if (num % i == 0)
            return 0; // Not prime
    }
    return 1; // Prime
}

int main() {
    int start, end;

    // Ask user for range
    printf("Enter the starting number: ");
    scanf("%d", &start);
    printf("Enter the ending number: ");
    scanf("%d", &end);

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

    // Loop through the range and print primes
    for (int i = start; i <= end; i++) {
        if (ISPRIME(i)) {
            printf("%d ", i);
        }
    }

    printf("\n");
    return 0;
}
```

```
                                        > cd "c:\Users\abiga\OneDrive\Desktop\Absproj\" ; if ($?) { gcc
exp6isprime.c -o exp6isprime } ; if ($?) { .\exp6isprime }
Enter the starting number: 55
Enter the ending number: 255
Prime numbers between 55 and 255 are:
59 61 67 71 73 79 83 89 97 101 103 107 109 113 127 131 137 139 149 151 157 163 167 173 179 181 191 193 197
 199 211 223 227 229 233 239 241 251
PS C:\Users\abiga\OneDrive\Desktop\Absproj>
```