

```

import random

# we take range from user as input
start_range = int(input("Enter you range where you want to start= "))
end_range = int(input("Enter your ending range where you want to end= "))
print("your range in between", "[", start_range, ":", end_range, "]")

# after take input from user
num = random.randint(start_range, end_range)
# randomly picked number by system
print(num, "random picked number by system ")

# first we check the number is positive or negative
if num > 0:
    print(num, "positive number picked by system")

    # number is positive then we check number is even or odd
    if num % 2 == 0:
        print(num, "Even number picked by system")

        # number is positive so, we check number is prime or not if number is negative
        # then we do not check prime number
        if num % 2 == 0:

            for i in range(2, num):
                if (num % i) == 0:
                    print(num, "is a composite number")
                    break
            else:
                print(num, "is a prime number")
    else:
        print(num, "odd number picked by system")

    # if number is odd then we check prime number
    if num % 2 != 0:
        for i in range(3, num):
            if (num % i) == 0:
                print(num, "is a composite number")
                break
        else:
            print(num, "is a prime number")

else:
    print(num, "negative number picked by system")
    if num % 2 == 0:
        print(num, "Even number picked by system")
    else:
        print(num, "odd number picked by system")

```

The screenshot shows the Visual Studio Code interface with the Explorer sidebar on the left displaying a project named 'PROJECTSPYTHON.PY'. The file 'cjbfd.py' is open in the editor. The code in the file is as follows:

```
32 print(num, "odd number picked by system")
33
34 # if number is odd then we check prime number
35 if num % 2 != 0:
36     for i in range(3, num):
37         if (num % i) == 0:
38             print(num, "is a composite number")
39             break
40     else:
41         print(num, "is a prime number")
42
43 else:
44     print(num, "negative number picked by system")
45     if num % 2 == 0:
46         print(num, "Even number picked by system")
47     else:
48         print(num, "odd number picked by system")
49
```

The TERMINAL panel at the bottom shows the execution of the script. The output is as follows:

```
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Warning: PowerShell detected that you might be using a screen reader and has disabled PSReadLine for compatibility purposes. If you want to re-enable it, run 'Import-Module PSReadLine'.

PS C:\projectspython.py> & C:/Users/Subha/AppData/Local/Programs/Python/Python39/python.exe c:/projectspython.py/cjbfd.py
Enter you range where you want to start= 903772882
Enter your ending range where you want to end= 8399377290288
your range in between [ 903772882 : 8399377290288 ]
7568743819245 random picked number by system
7568743819245 positive number picked by system
7568743819245 odd number picked by system
7568743819245 is a composite number
PS C:\projectspython.py>
```

The screenshot shows the Visual Studio Code interface with the Explorer sidebar on the left displaying a project named 'PROJECTSPYTHON.PY'. The file '1stprojest.py' is open in the editor. The code in the file is as follows:

```
49 print(num, "odd number picked by system")
```

The TERMINAL panel at the bottom shows the execution of the script. The output is as follows:

```
Warning: PowerShell detected that you might be using a screen reader and has disabled PSReadLine for compatibility purposes. If you want to re-enable it, run 'Import-Module PSReadLine'.

PS C:\projectspython.py> & C:/Users/Subha/AppData/Local/Programs/Python/Python39/python.exe c:/projectspython.py/1stprojest.py
Enter you range where you want to start= 90
Enter your ending range where you want to end= 1000000
your range in between [ 90 : 1000000 ]
668911 random picked number by system
668911 positive number picked by system
668911 odd number picked by system
668911 is a composite number
PS C:\projectspython.py>
```