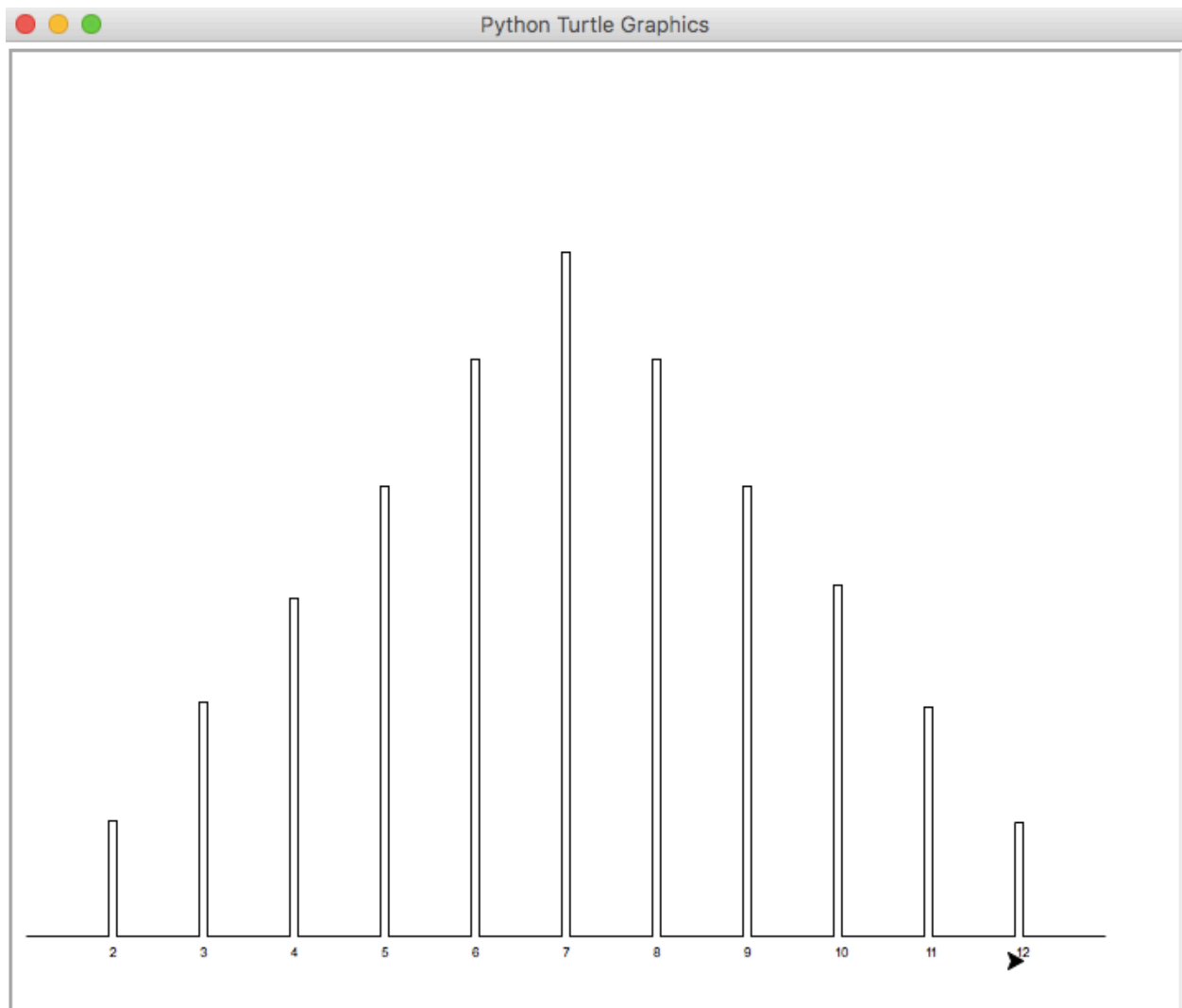


Please enter number of times of rolling dice: 100000

[0, 0, 2812, 5691, 8191, 10916, 13984, 16604, 14009, 10928, 8536, 5574, 2755]



CODE:

Program #1

```
import random
```

```
def main():
    diceSumNum = open("diceSumNum.txt", "w")
    numSums = getUserInput()
    for i in range (numSums):
        dice1 = random.randint(1,6)
        dice2 = random.randint(1,6)
        sum = str(dice1 + dice2) + '\n'
        diceSumNum.write(sum)
    diceSumNum.close()

def getUserInput():
    while True:
        try:
            return int(input("Please enter number of times of rolling dice: "))
        except ValueError:
            print("Invalid input. Please try again!")

main()
```

Program #2

```
def main():
    sort = [0]*13
    diceSumNum = open("diceSumNum.txt", "r")
    sortFile = open("sortFile.txt", "w")

    line = diceSumNum.readline()
    while(line!=""):
        line = line.rstrip('\n')
        lineInt = int(line)
        sort[lineInt]+=1
        line = diceSumNum.readline()

    for i in range (len(sort)):
        sortFile.write(str(sort[i])+'\n')

    diceSumNum.close()
    print(sort)

main()
```

Program #3:

```
import turtle
```

```
def main():
```

```
    g = turtle.Turtle()
```

```
    g.up()
```

```
    g.goto(-350, -200)
```

```
    g.down()
```

```
    g.speed(10)
```

```
    sortFile = open("sortFile.txt", "r")
```

```
    line0 = sortFile.readline()
```

```
    line1 = sortFile.readline()
```

```
    line = sortFile.readline()
```

```
    line = line.rstrip('\n')
```

```
    while(line!=""):
```

```
        lineInt = int(line)
```

```
        g.forward(50)
```

```
        if(lineInt!=0):
```

```
            g.left(90)
```

```
            g.forward(lineInt*0.1)
```

```
            g.right(90)
```

```
            g.forward(5)
```

```
            g.right(90)
```

```
            g.forward(lineInt*0.1)
```

```
            g.left(90)
```

```
        else:
```

```
            g.forward(5)
```

```
    line = sortFile.readline()
```

```
    line = line.rstrip('\n')
```

```
    g.forward(50)
```

```
    g.up()
```

```
    g.goto(-350, -215)
```

```
    for i in range (2,13):
```

```
        g.forward(51.5)
```

```
        g.write(i)
```

```
        g.forward(3.5)
```

```
    sortFile.close()
```

```
main()
```