Q2

```c
#include <stdio.h>
#include <stdlib.h>

int main(int argc, char*arg[])
{
        int n = 0;

        printf("Enter the number of entries: ");
        scanf("%d", &n);
        int arr[n];

        for(int i = 1; i <= n; i++)
        {
                if(i == 1)
                {
                        printf("Enter the 1st number: ");
                        scanf("%d", &arr[i-1]);
                }
                else if(i == 2)
                {
                        printf("Enter the 2nd number: ");
                        scanf("%d", &arr[i-1]);
                }
                else if(i == 3)
                {
                        printf("Enter the 3rd number: ");
                        scanf("%d", &arr[i-1]);
                }
                else
                {
                        printf("Enter the %dth number: ", i);
                        scanf("%d", &arr[i-1]);
                }
        }

        int largest = 0;
        for(int i = 0; i < n; i++)
        {
                if(largest < arr[i])
                        largest = arr[i];
        }
```

```c
        int largest = 0;
        for(int i = 0; i < n; i++)
        {
                if(largest < arr[i])
                        largest = arr[i];
        }

        printf("Largest Number is: %d\n", largest);

        return 0;
}
```

Q3

```
  GNU nano 6.2
#include <stdio.h>
#include <stdlib.h>

int main(int argc, char*arg[])
{
        int sum = 0;
        for(int i = 1; i < argc; i++)
        {
                sum += atoi(arg[i]);
        }

        printf("Sum: %d\n", sum);

        return 0;
}
```

Q4

function.h:

```
  GNU nano 6.2
#ifndef FUNCTION_H
#define FUNCTION_H

int max(int n, char* arr[]);
float avg(int n, char* arr[]);
int sum(int n, char* arr[]);
int min(int n, char* arr[]);

#endif
```

sum.c:

```
  GNU nano 6.2
#include "function.h"
#include <stdlib.h>

int sum(int n, char* arr[])
{
        int sum = 0;
        for(int i = 1; i < n; i++)
        {
                sum += atoi(arr[i]);
        }

        return sum;
}
```

avg.c:

```
  GNU nano 6.2
#include "function.h"
#include <stdlib.h>

float avg(int n, char* arr[])
{
        float sum = 0;
        for(int i = 1; i < n; i++)
        {
                sum += atoi(arr[i]);
        }

        return sum/n;
}
```

min.c:

```
  GNU nano 6.2
#include "function.h"
#include <limits.h>
#include <stdlib.h>

int min(int n, char* arr[])
{
        int smallest = INT_MAX;
        for(int i = 1; i < n; i++)
        {
                if(smallest > atoi(arr[i]))
                        smallest = atoi(arr[i]);
        }

        return smallest;
}
```

max.c:

```
  GNU nano 6.2
#include "function.h"
#include <limits.h>
#include <stdlib.h>

int max(int n, char* arr[])
{
        int largest = INT_MIN;
        for(int i = 1; i < n; i++)
        {
                if(largest < atoi(arr[i]))
                        largest = atoi(arr[i]);
        }

        return largest;
}
```

main.c:

```
  GNU nano 6.2
#include <stdio.h>
#include "function.h"

int main(int argc, char* arg[])
{
        int mymin = min(argc, arg);
        int mymax = max(argc, arg);
        float myavg = avg(argc, arg);
        int mysum = sum(argc, arg);

        printf("Sum of Array: %d\n", mysum);
        printf("Minimum Value: %d\n", mymin);
        printf("Maximum Value: %d\n", mymax);
        printf("Average Value: %.2f\n", myavg);

        return 0;
}
```

Makefile:

```
  GNU nano 6.2
final: function.h sum.c avg.c max.c min.c main.c
        gcc -o final sum.c avg.c max.c min.c main.c
```