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BSCS 1-1

Computer Programming 1 – Activity 10 (Temperature Conversion)

Output

```
Temperature Converter

1. Celsius to Farenheit
2. Farenheit to Celsius

Choose conversion (1 or 2): 5

Invalid Choice, Please input 1 or 2
Choose conversion (1 or 2): 2

How many temperatures do you want to convert?: 2

Enter 2 temperatures:
10
40

Converted Temperatures:

10.00°F = -12.32°C
40.00°F = 4.48°C
```

```
Temperature Converter

1. Celsius to Farenheit
2. Farenheit to Celsius

Choose conversion (1 or 2): 1

How many temperatures do you want to convert?: 5

Enter 5 temperatures:
12
54
23
87
17

Converted Temperatures:

12.00°C = 53.60°F
54.00°C = 129.20°F
23.00°C = 73.40°F
87.00°C = 188.60°F
17.00°C = 62.60°F
```

Source Code

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

int main() {
        int choice = 0, num;

        printf("Temperature Converter\n\n");
    printf("1. Celsius to Farenheit\n");
    printf("2. Farenheit to Celsius\n");

    while (choice != 1 && choice != 2) {
        printf("\nChoose conversion (1 or 2): ");
        scanf("%d", &choice);

        if(choice != 1 && choice != 2) {
                printf("\nInvalid Choice, Please input 1 or 2");
                }
        }

    printf("\nHow many temperatures do you want to convert?: ");
    scanf("%d", &num);

    printf("\nEnter %d temperatures:\n", num);

        float temperatures[num];

    for(int i = 0; i < num; i++){
        scanf(" %f", &temperatures[i]);
    }

    printf("\nConverted Temperatures:\n");

    float convertedTemperatures[sizeof(temperatures) /
sizeof(temperatures[0])];

        for(int i = 0; i < num; i++) {
        if(choice == 1)
                convertedTemperatures[i] = (1.8 * temperatures[i]) + 32;
        else
                convertedTemperatures[i] = 0.56 * (temperatures[i] - 32);
        }



        for(int i = 0; i < num; i++){
                if(choice == 1)
                printf("\n%.2f°C = %.2f°F", temperatures[i],
convertedTemperatures[i]);
        else
                printf("\n%.2f°F = %.2f°C", temperatures[i],
convertedTemperatures[i]);
```

```
    }

        return 0;
}
```