Pseudo Code Assignment

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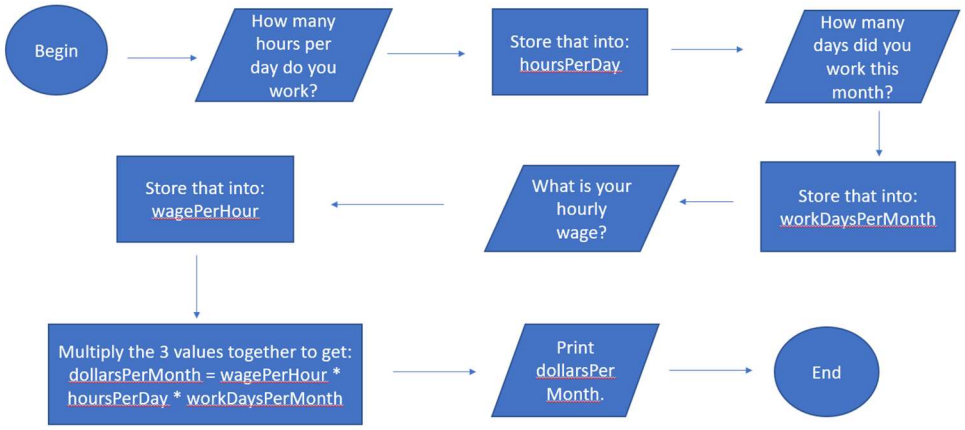
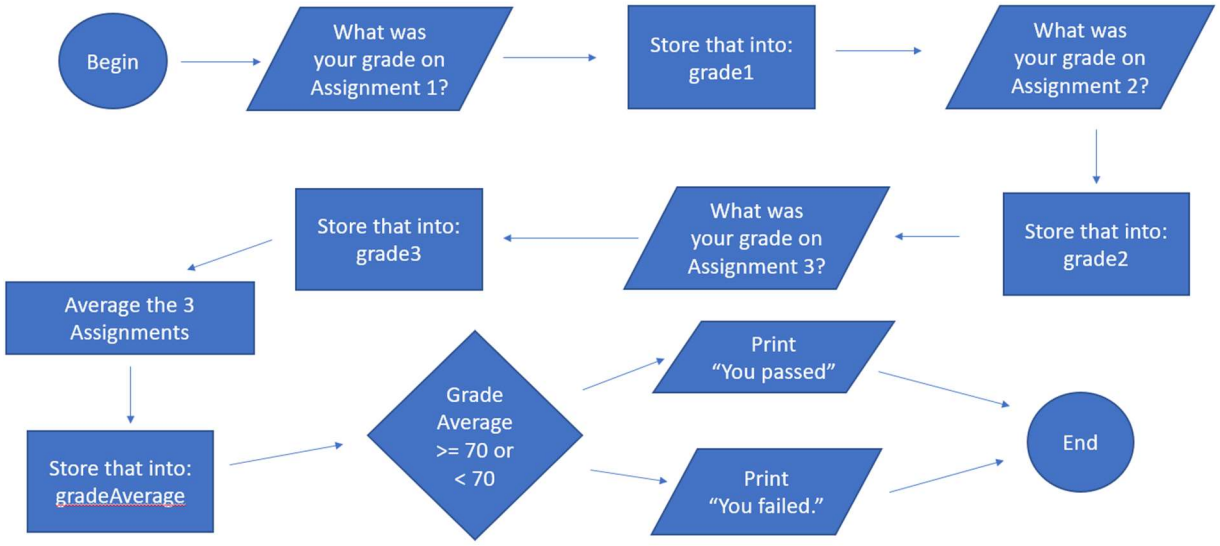
- **Employee Income**
  - **List**
    - Ask for how much they work each day.
    - Ask for how many days they worked this month.
    - Ask what their hourly wage is.
    - Multiply these values to get their monthly income.
    - Display the result.
  - **Flow Diagram**



  - **Pseudocode**
    - Start
      - Input “How many hours per day do you work?”
      - hoursPerDay = input
      - input “how many days did you work this month?”
      - workDaysPerMonth = input
      - input “what is your hourly wage?”
      - wagePerHour = input
      - dollarsPerMonth= wagePerHour * hoursPerDay * workDaysPerMonth
      - print dollarsPerMonth
    - End
  - **C# Code**

```
case 1:
    Console.WriteLine("You have chosen option {0}", option);

    Console.WriteLine("How many hours per day do you work?");
    decimal hoursPerDay = decimal.Parse(Console.ReadLine());

    Console.WriteLine("How many days did you work this month?");
    decimal workDaysPerMonth = decimal.Parse(Console.ReadLine());

    Console.WriteLine("What is your hourly wage?");
    decimal wagePerHour = decimal.Parse(Console.ReadLine());

    decimal dollarsPerMonth = wagePerHour * hoursPerDay * workDaysPerMonth;

    Console.WriteLine("Your monthly income is ${0}",dollarsPerMonth);
    flag = true;

    break;
```

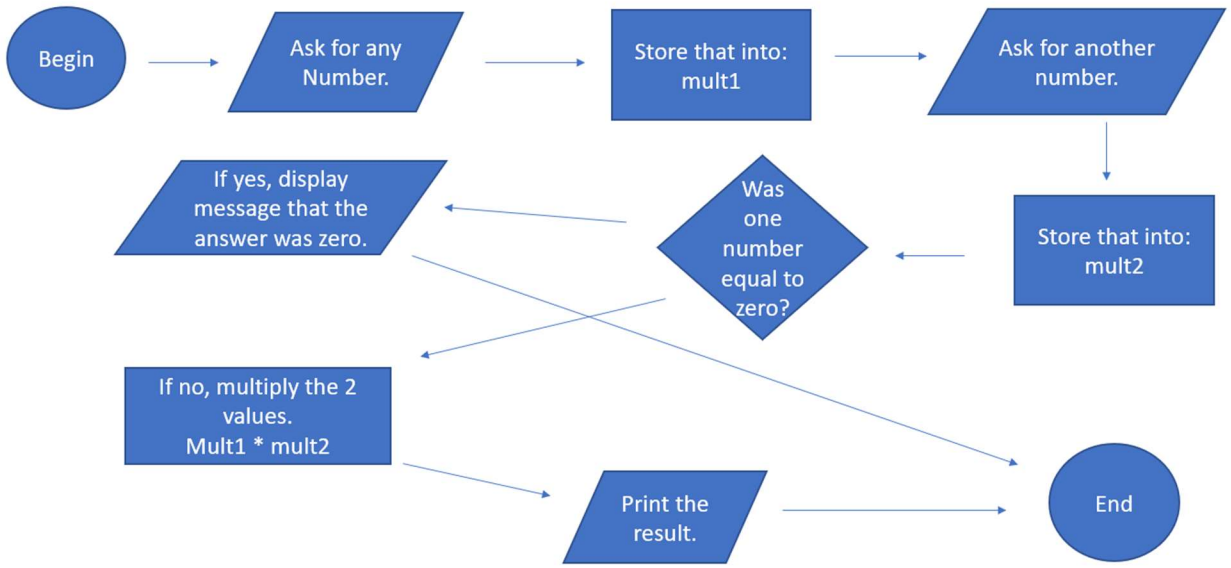
- **Class Pass or Fail**
  - **List**
    - Ask for their grades on their assignments. (e.g. 3 assignments)
    - Average the assignments.
    - Compare the result to 70 (a passing grade)
    - Display the result.
  - **Flow Diagram**



  - **Pseudocode**
    - Start
      - Input "What was your grade on Assignment 1"
      - grade1 = input
      - Input "What was your grade on Assignment 2"
      - grade2 = input
      - Input "What was your grade on Assignment 3"
      - grade3 = input
      - gradeAverage = (grade1 + grade2 +grade3) / 3
      - if gradeAverage >= 70
        - Print "Congratulations, you passed"
      - Else
        - Print "Oops, you failed."
    - End
  - **C# Code**

```
1 reference
public static void PassOrFail()
{
    Console.WriteLine("What was your grade on Assignment 1? e.g. 50, 70, 100");
    decimal grade1 = decimal.Parse(Console.ReadLine());

    Console.WriteLine("What was your grade on Assignment 2? e.g. 50, 70, 100");
    decimal grade2 = decimal.Parse(Console.ReadLine());

    Console.WriteLine("What was your grade on Assignment 3? e.g. 50, 70, 100");
    decimal grade3 = decimal.Parse(Console.ReadLine());

    decimal gradeAverage = (grade1 + grade2 + grade3) / 3;
    if (gradeAverage >= 70)
    {
        Console.WriteLine("Congratulations, you passed. Your grade was ${0}%", gradeAverage);
    }
    else
    {
        Console.WriteLine("Oops, you failed. Your grade was {0}%", gradeAverage);
    }
}
```

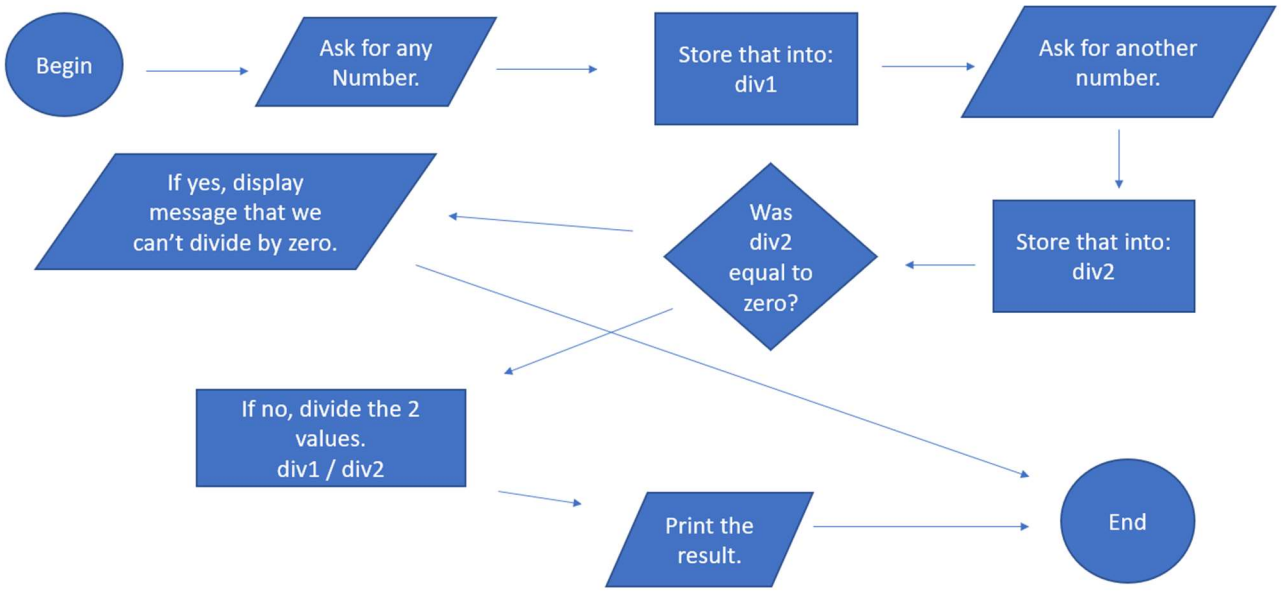
- **Multiply Two Values**
  - **List**
    - Ask for one number.
    - Ask for another number.
    - Multiply the two numbers together.
    - If one of the numbers is zero, display a message.
    - Display the result.
  - **Flow Diagram**



  - **Pseudocode**
    - Start
      - Input “Give me any number except for zero”
      - mult1 = input
      - Input “Give any number to multiply it with except for zero.”
      - mult2 = input
      - if mult1 or mult2 are equal to zero
        - Print “One of your numbers was zero, therefore the answer is zero”
      - Else
        - multAnswer = mult1 * mult2
        - Print multAnswer
    - End
  - **C# Code**

```
1 reference
public static void Multiply2Values()
{
    Console.WriteLine("Give me any number except for zero");
    float mult1 = float.Parse(Console.ReadLine());

    Console.WriteLine("Give me any number to multiply it with except for zero");
    float mult2 = float.Parse(Console.ReadLine());
    float multAnswer = 0;

    if (mult1 == 0 || mult2 == 0)
    {
        Console.WriteLine("One of your numbers was zero, therefore the answer is zero.");
    }
    else
    {
        multAnswer = mult1 * mult2;
        Console.WriteLine($"{mult1} x {mult2} = {multAnswer}", multAnswer);
    }

}
```

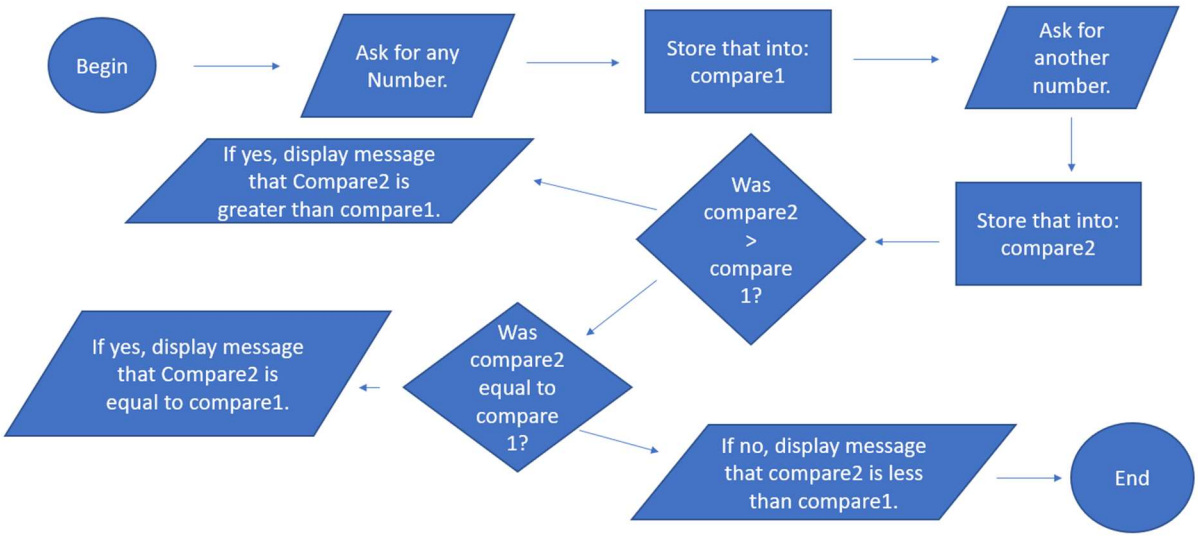
- **Divide Two Values**
  - **List**
    - Ask for one number.
    - Ask for another number.
    - Divide the two numbers together.
    - If the second number is zero, display a message.
    - Display the result.
  - **Flow Diagram**



  - **Pseudocode**
    - Start
      - Input "Give me any number"
      - div1 = input
      - Input "Give any number to divide it with except for zero."
      - div2 = input
      - if div2 is equal to zero
        - Print "Your second number was zero. I cannot divide by zero"
      - Else
        - divAnswer = div1 / div22
        - Print divAnswer
    - End
  - **C# Code**

```
1 reference
public static void Divide2Values()
{
    Console.WriteLine("Give me any number.");
    float div1 = float.Parse(Console.ReadLine());

    Console.WriteLine("Give me any number to divide by except for zero");
    float div2 = float.Parse(Console.ReadLine());
    float divAnswer = 0;

    if (div2 == 0)
    {
        Console.WriteLine("Your second number was zero. I cannot divide by zero.");
    }
    else
    {
        divAnswer = div1 / div2;
        Console.WriteLine($"{div1} / {div2} = {divAnswer}", divAnswer);
    }

}
```

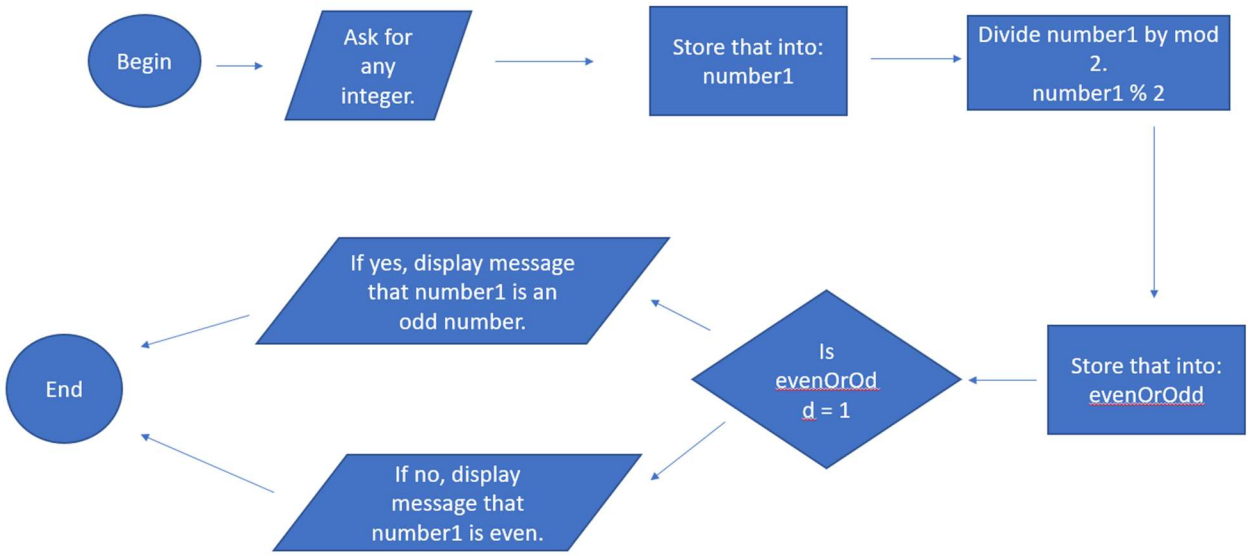
- **Compare Two Values**
  - **List**
    - Ask for one number.
    - Ask for another number.
    - If the second number is greater than the first display a message.
    - If the second number is equal to the first display a message.
    - If the second number is less than the first display a message.
  - **Flow Diagram**



  - **Pseudocode**
    - Start
      - Input “Give me any number”
      - compare1 = input
      - Input “Give any number to compare it to.”
      - compare2 = input
      - if compare2 > compare1
        - Print “compare 2 is greater than compare1”
      - Else if compare2 = compare1
        - Print “compare 2 is equal to compare1.”
      - Else
        - Print “compare 2 is less than compare1”
    - End
  - **C# Code**

```
1 reference
public static void Compare2Values()
{
    Console.WriteLine("Give me any number.");
    float compare1 = float.Parse(Console.ReadLine());

    Console.WriteLine("Give me another number to compare it to.");
    float compare2 = float.Parse(Console.ReadLine());

    if (compare2 > compare1)
    {
        Console.WriteLine($"{compare2} was greater than {compare1}.");
    }
    else if (compare2 == compare1)
    {
        Console.WriteLine($"{compare2} was equal to {compare1}.");
    }
    else
    {
        Console.WriteLine($"{compare2} was less than {compare1}.");
    }
}
```

- **Even or Odd**
  - **List**
    - Ask for an integer.
    - Divide that integer by modulo 2.
    - If the result is 1, the integer is odd.
    - If the result is 0, the integer is even.
    - Print the result.
  - **Flow Diagram**



  - **Pseudocode**
    - Start
      - Input “Give me any integer”
      - number1 = input
      - evenOrOdd = number1 % 2
      - if evenOrOdd = 1
        - Print “number1 is an odd number”
      - Else
        - Print “number1 is an even number.”
    - End
  - **C# Code**

```
1 reference
public static void EvenOrOdd()
{
    Console.WriteLine("Give me any integer.");
    int number1 = int.Parse(Console.ReadLine());

    int evenOrOdd = number1 % 2;

    if (evenOrOdd == 1)
    {
        Console.WriteLine($"{number1} is an odd number");
    }
    else
    {
        Console.WriteLine($"{number1} is an even number");
    }
}
```