Task 1: **Variables**

1. And b)

<script>

        let num = prompt("Please enter a number! ");

        console.log("Quantity:",num);

        let percentage = prompt("Please enter a percentage!: ");

        let percent =num/2 ;

        console.log(percentage,"% of Quantity,",num,"is ",percent);

  </script>

Task 2: **Variables & Conditionals**

 <script>

      a) // let num = prompt("Please enter a grade number between 1 and 100!");

       // num=parseInt(num);

       // if (num >= 91)

   // {

     //   console.log("A");

   // }

   // else if (num >=81 )

   // {

   //     console.log("B");

   // }

    //else if (num >=71 )

   // {

   //     console.log("C");

   // }

   // else if (num >=61 )

   // {

   //     console.log("D");

    //}

    //else if (num >=0 )

   // {

   //     console.log("F");

   // }

    //else

   // {

    //   console.log("Thats not right, Please reenter a number!");

    //}

   b) let num = prompt("Please enter a grade number between 1 and 100!");

    num=parseInt(num);

    let num1 = num >=90;

    let num2 = num >=80;

    let num3 = num >=70;

    let num4 = num >=60;

    let num5 = num >=0;

    if (!(isNaN(num)))

{

    switch(num1, num2, num3, num4, num5)

    {

        case   num1:

            console.log("A");

            break;

        case  num2 :

            console.log("B");

            break;

        case  num3 :

            console.log("C");

            break;

        case  num4 :

            console.log("D");

            break;

        case  num5 :

            console.log("F");

            break;

    }

}

    </script>

Task 3: **Variables and loops**

 <script>

let prof = prompt("What is the punishing professors name? ");

        let numLine = prompt("What line are you wanting to write? ");

        let num = prompt("How many times would you like the line to be written? ");

       num=parseInt(num);

      for( let line = 1;line <=num;line++)

        {

console.log(`${line}  ${numLine}`);

        }

    </script>

Task 4: **Variables, Loops, DOM**

<script>

         let divLines = document.querySelector(".lines");

        let heading = document.querySelector(".whoIsUmbridge")

        let prof = prompt("What is the punishing professors name? ");

        let numLine = prompt("What line are you wanting to write? ");

        let num = prompt("How many times would you like the line to be written? ");

        num= parseInt(num);

        heading.textContent = "Umbridge";

        let prodStr = "";

        let line = 1;

       while( line <=num )

    {

        let prod = num \*line;

         prodStr += `<li> ${line} ${numLine}/li>`;

        line++

    }

    divLines.innerHTML = prodStr;

</script>

Task 5: **Variables, Loops, DOM, Function**

<script>

 const potterInfo = (line,phaseLine) =>

    {

        return(` ${line} ${phraseLine}`);

    }

  let prof =prompt("What is the punishing professors name? ");

   let phraseLine=prompt("What line are you wanting to write? ");

   let num = prompt("How many times would you like the line to be written? ");

   num= parseInt(num);

   let line = 1;

   while(line <= num)

   {let str= potterInfo(num,phraseLine);

   console.log(str);

   line++;   }

</script>

Task 6: **Variables, Loops, Functions**

Strategy 1:

<script>

        let prodStr = "";

       for (let factor1 =1; factor1 <=12; factor1++)

    {

        let num=1;

        num=parseInt(num);

        let prod = num \* factor1;

        prodStr += `

        ${num} X ${factor1} = ${prod}

        `;

    }

    for (let factor2 =1; factor2 <=12; factor2++)

    {

        let num=2;

        num=parseInt(num);

        let prod = num \* factor2;

        prodStr += `

        ${num} X ${factor2} = ${prod}

        `;

    }

    for (let factor3 =1; factor3 <=12; factor3++)

    {

        let num=1;

num=parseInt(num);

        let prod = num \* factor3;

        prodStr += `

        ${num} X ${factor3} = ${prod}

        `;

    } for (let factor4 =1; factor4 <=12; factor4++)

    {

        let num=4;

        num=parseInt(num);

        let prod = num \* factor4;

        prodStr += `

        ${num} X ${factor4} = ${prod}

        `;

    } for (let factor5 =1; factor5 <=12; factor5++)

    {

        let num=5;

        num=parseInt(num);

        let prod = num \* factor5;

        prodStr += `

        ${num} X ${factor5} = ${prod}

        `;

    } for (let factor6 =1; factor6 <=12; factor6++)

    {

        let num=6;

        num=parseInt(num);

        let prod = num \* factor6;

        prodStr += `

        ${num} X ${factor6} = ${prod}

        `;

    } for (let factor7 =1; factor7 <=12; factor7++)

    {

        let num=7;

        num=parseInt(num);

        let prod = num \* factor7;

        prodStr += `

        ${num} X ${factor7} = ${prod}

        `;

    } for (let factor8 =1; factor8 <=12; factor8++)

    {

        let num=8;

        num=parseInt(num);

        let prod = num \* factor8;

        prodStr += `

        ${num} X ${factor8} = ${prod}

        `;

    } for (let factor9 =1; factor9 <=12; factor9++)

    {

        let num=9;

        num=parseInt(num);

        let prod = num \* factor9;

        prodStr += `

        ${num} X ${factor9} = ${prod}

        `;

    } for (let factor10 =1; factor10 <=12; factor10++)

    {

        let num=10;

        num=parseInt(num);

        let prod = num \* factor10;

        prodStr += `

        ${num} X ${factor10} = ${prod}

        `;

    } for (let factor11 =1; factor11 <=12; factor11++)

    {

        let num=11;

        num=parseInt(num);

        let prod = num \* factor11;

        prodStr += `

        ${num} X ${factor11} = ${prod}

        `;

    } for (let factor12 =1; factor12 <=12; factor12++)

    {

        let num=12;

        num=parseInt(num);

        let prod = num \* factor12;

        prodStr += `

        ${num} X ${factor12} = ${prod}

        `;

    }

    console.log(prodStr);

    </script>

Strategy 2:didn’t finish.

Strategy 3: didn’t finish.

Task 7:  **Hoisting**

 <script>

        //hoisting is using a variable or a function before it is declared

        //a) a function

        //This code runs without any error, despite the square() function being called before it's declared.

    //b) a variable

        //Being able to use a variable's value in its scope before the line it is declared

    //a) a function

    //console.log(greetings);

    //function greetings()

    //{

    //return("How are you"):

   // }

    //b) a variable

   // console.log(greetings == "How are you");

    //var greetings="How are you" ;

    //function()

    //{

   // console.log(greetings);

    //var greeting=””;

</script>