Q)Write a program to print the series 4,6,12,18,30,42,60,72.

```
let count1 = 0;
let count2 = 0;

let n = 80;
for (let i = 3; i < n; i++) {
  for (let j = 2; j < i; j++) {
    if (i % j === 0) {
      count1++;
      break;
    }
  }
  let twinP = i + 2;
  for (let k = 2; k < i; k++) {
    if (twinP % k === 0) {
      count2++;
      break;
    }
  }
  if (count1 === 0 && count2 === 0) {
    console.log(i + 1);
  }
  count1 = 0;
  count2 = 0;
}
```

Q)Write a program to find all the Palindrome dates that come between the year 01-01-2001 till 31-12-2021. eg. 10-02-2001

```
let maxYear = 2021;
let minYear = 2001;

function isLeap(year) {
  return (year % 4 == 0 && year % 100 != 0) || year % 400 == 0;
}

function isValidDate(day, month, year) {
  if (year > maxYear || year < minYear) return false;
  if (month < 1 || month > 12) return false;

  const lastDayOfMonth = new Date(year, month, 0).getDate();
  if (day < 1 || day > lastDayOfMonth) return false;
```

```javascript
  if (month == 2) {
    return isLeap(year) ? day <= 29 : day <= 28;
  }

  if (month == 4 || month == 6 || month == 9 || month == 11) return day <= 30;

  return true;
}

function isPalindrome(str) {
  return str === str.split("").reverse().join("");
}

function printPalindromeDates(y1, y2) {
  for (let year = y1; year <= y2; year++) {
    for (let month = 1; month <= 12; month++) {
      const lastDayOfMonth = new Date(year, month, 0).getDate();

      for (let day = 1; day <= lastDayOfMonth; day++) {
        let strYear = "" + year;
        let strMonth = String(month).padStart(2, "0");
        let strDay = String(day).padStart(2, "0");

        let rev = strYear.split("").reverse().join("");

        if (isLeap(year)) {
          if (
            isValidDate(day, month, year) &&
            isPalindrome(strDay + strMonth + rev)
          ) {
            console.log(`${strDay}-${strMonth}-${strYear}`);
          }
        } else {
          if (
            isValidDate(day, month, year) &&
            isPalindrome(strDay + strMonth + rev.substr(0, 2))
          ) {
            console.log(`${strDay}-${strMonth}-${strYear}`);
          }
        }
      }
    }
  }
}
```

```
}

let y1 = 2001,
  y2 = 2021;
printPalindromeDates(y1, y2);
```