ASSIGNMENT-10

1. Write a function to calculate the area of a circle (TSRS):

```
float area of circle (float r)
{
    float area;
    area = 3.14 * r * r;
    return area;
}
```

2. Write a function to calculate simple interest (TS

```
int SI (int pamt, int time, int rate)
{
    int interest;
    interest = (pamt * time * rate)/100;
    return interest;
}
```

3. Write a Program to Check to wheather a given number is even or odd. Return 1 if the number is even, Otherwise 0. (TSRS)

```
int number (int n)
{
    if (n % 2 == 0)
        return 1;
    else
        return 0;
}
```

4. Write a function to print first N natural numbers (TSRN).

```
Void natural (int n)
{
  int i;
  for (i=1; i<=n; i++)
  {
    Printf (" %d", i);
  }
  return 0;
}
```

5. Write a function to printe first N odd natural numbers (TSRN).

```
Void odd (int n)
{
  int i;
  for (i=1; i<=n; i++)
  {
    Printf (" %d", 2*i-1);
  }
}
```

6. Write a funetion to Print Calculate functional of a numbers (TSRNS)

```
int functional (int x)
{
  int i; fact = i;
  for (i=1; i<=x; i++)
  {
    fact = fact * i;
  }
  if (i>x)
    return fact;
}
```

7. Write a function to calculate the numbe of Combinations one can make from n items and r selected at a time. (TSRS)

```
int comb( int n, int r )
{
    int c;
    c = fact (n) /(fact (r)* fact (n-r));
    return 0;
}
```

8. Write a function to calculate the numbe of arrangements one an make from n items and r selected at a time : (TSRS)

arrangement = Promotation.

```
int Prom ( int n, int r )
{
    int p;
    p = fact (n) / fact (n-r);
    return p;
}
```

9. Write a function to Check wheather a given Contains a given number or not. (TSRS).

```
int Check digit ( int x, int digit )
{
    int r;
    while (x)
    {
        r = x % 10;
        if (r == digit)
        return 1;
        x = x/10;
    }
    return 0;
}
```

10. Write a function to print all prime of a given number. For example, if the number is 36 then your result should be 2, 2, 3, 3 (TSRN):

```
Void PrimeFact (int x)
{
    int i;
  for (i= 2; i<= x; i++
    {
      while (x % i == 0)
      {
        x = x / i;
        Printf (" %d", i);
      }
    }
}
```