Assignment - 6

#include < stdio·h > included in all answers.

1.
```c
int main() {
    int x, i, sum = 0;
    printf ("%d", &x); ("Enter a number");
    scanf ("%d", &x);
    for (i = 1; i <= x; i++) {
        sum = sum + i;
    }
    printf ("%d", sum);
    return 0;
}
```

2.
```c
int main() {
    int i, x, sum = 0
    printf ("Enter a number");
    scanf ("%d", &x);
    for (i = 1; i <= x*2; i++) {
        if (i % 2 == 0)
            sum = sum + i;
    }
    printf ("%d", sum);
    return 0;
}
```

```c
3.  int main() {
    int x, sum = 0, i;
    printf("Enter a number");
    scanf("%d", &x);
    for (i = 1; i <= 2*x; i++)
    {
        if (i%2)
            sum = sum + i;
    }
    printf("sum = %d", sum);
    return 0;
}

4.  int main() {
    int x, sum = 0, i;
    printf("Enter a no");
    scanf("%d", &x);
    for (i = 1; i <= x; i++)
        sum = sum + i*i;
    printf("sum = %d", sum);
    return 0;
}

5.  int main() {
    int x, sum = 0, i;
    printf("Enter a number");
    scanf("%d", &x);
    for (i = 1; i <= x; i++)
        sum = sum + i*i*i;
    printf("sum = %d", sum);
    return 0;
}
```

```c
6.    int main() {
      int x, i, fact = 1;
      printf("Enter a number");
      scanf("%d", &x);
      while (x > 0)
      {
          fact = fact * x;
          x--;
      }
      printf("factorial = %d", fact);
      return 0;
}
```

```c
7.    int main() {
      int x, i, count = 0;
      printf("Enter a number");
      scanf("%d", &x);
      while (x)
      {
          count++;
          x = x/10;
      }
      printf("%d", count);
}
```

```c
8.    int main() {
      int x, i;
      printf(" Enter a number");
      scanf("%d", &x);
      if(x == 1)
      {
          printf(" not prime");
          exit(0);
      }
      else
          for(i = 2; i <= x; i++)
          {
              if(x%i == 0)
              break;
          }
      if(x == i)
          printf(" prime number");
      else
          printf(" not prime number");
          return 0;
      }

9.    int main() {
      printf(" Enter two numbers);
      scanf("%d %d", &x1, &x2);
      for(i1 = 1; i1 <= 100; i1++)
      for(i2 = 1; i2 <= 100; i2++)
      {
          if(i1*x1 == i2*x2)
          { printf(" LCM = %d", x1 * i1);
            exit(0);
          }
      }
      return 0;
      }
```

```c
10    int main ()
{
    int x, rev, y
    int x, rev = 0, i ;
    printf (" Enter a number");
    scanf ("%.d", &x);
    while (x)
    {
        i = x%10;
        x = x/10;
        rev = i + rev * 10;
    }
    printf ("%.d", rev);
    return 0;
}
```