÷ Assignment - 10 ÷

1.
```
int main()
Void area (int);
int main ()
{ int r;
  Printf ("ENTER The value of r:");
  Scanf ("%d", &r);
  area (r);
  return 0;
}
  Void area (int r)
{ float are_of_circle;
  area_of_circle = 3.14 * r * r;
  Printf ("%f", area_of_circle);
}
```

2.
```
int main
float SI (int, int, int);
int main ()
{ int P, r, t;
  float K;
  Printf ("Enter the value of P, r, t:");
  Scanf ("%d%d%d", &P, &r, &t);
  K = SI (P, r, t);
  Printf ("%f", K);
  return 0;
}
float SI (int P, int r, int t)
{ float Si;
  Si = (P * r * t) / (float) 100;
  return Si;
}
```

x^3 - 2x + 11

```
int check (int);
int main ()
{
  int x, K;
  Printf ("ENTER a NO");
  Scanf ("%d", &x);
  K = check (x);
  Printf ("%d", K);
  return 0;
}
  int chek (int a)
  {
     if (a % 2 == 0)
      return 1;
      else
      return 0;
  }

 int print (int);
 int main ()
{
   Int x;
   Printf (" Enter a no: ");
   Scanf ("%d", &x);
    Printf (x);
   return 0;
}
  int print (int a)
{  int i;
   for (i = 1; i <= a; i++)
    Printf ("%d", i);
}
```

5.
```
int PrintOdd (int);
int main ()
{ int x;
  Printf ("Enter a no");
  Scanf ("%d", &x);
  PrintOdd (x);
  return 0;
}
int Printodd (int a)
{ int i;
  for (i=1; i<=2*a; i++)
    if (i%2 != 0)
    Printf ("%d", i);
}
```

6.
```
int factorial (int);
int main ()
{ int x, K;
  Printf ("Enter a no:");
  Scanf ("%d", &x);
  K = factorial (x);
  Printf ("%d", K);
  return 0;
}
  int factorial (int a)
{
    int i, fact = 1;
    for (i=1; i<=a; i++)
      fact = fact * i;
    return fact;
}
```

```
int combination(int, int, int), nfact(int), rfact(int),
                fact(int);
int main()
{ int n, r;
  float K;
  printf("Enter n-item and r-selected at a
          times :");
  scanf("%d%d", &n, &r);
  K = combination(n, r, n-r);
  printf("%f", K);
  return 0;
}
int combination(int n, int r, int b)
{
  float total_calc;
  int P, Q, S;
  P = nfact(n);
  Q = nfact(r);
  S = fact(n-r);
  total_calc = P/(float)(Q*S);
  return total_calc;
}
 int nfact(int n)
{ int i, fact1 = 1;
  for(i=1; i<=n; i++)
   fact1 = fact1 * i;
   return fact1;
}
 int rfact(int r)
{ int i, fact = 1;
  for(i=1; i<=r; i++)
   fact = fact * i;
  return fact;
}
```

```
int fact (int b)
{ int i, fact2 = 1;
  for (i=1; i<=b; i++)
  fact2 = fact2 * i;
  return fact2;
}
```

8.
```
int permutation (int, int), nfact (int), sfact (int);
 int main ()
{ int n, s;
   float K;
  printf (" Enter n, item and s- selected at
          a time : ");
  scanf ("%d%d", &n, &s);
  K = permutation (n, s);
  if (n>s)
  printf ("%f", K);
  else
  printf ("not valid");
  return 0;
}
 int permutation (int n, int s)
{ float total_calc;
    int P, q;
  P = nfact (n);
  q = sfact (s);
  total_calc = P/(float) q;
  return total_calc;
}
```

```
int nfact(int n)
{ int i, fact1 = 1;
  for(i=1; i<=n; i++)
  fact1 = fact1 * i;
  return fact1;
}
int rfact(int i)
{ int i, fact=1;
  for(i=1; i<=8; i++)
  fact = fact * i;
  return fact;
}
```

9.

```
int check(int, int);
int main()
{ int n, k, x;
  Printf("Enter a no:");
  Scanf("%d", &n);
  printf("enter key no:");
  Scanf("%d", &x);
  k = check(n, x);
  if(k==1)
  Printf("Key element present");
  else
  Printf("key element not present");
  return 0;
}
int check(int a, int b)
{ int rem, c=a, d=b;
  while(c!=0) {
  rem = c%10;
  if(rem==d)
  return 1;
  else
  return 0;
  c = c/10;
  }
}
```

10
```
Void Primefactor (int);
int main()
{ int n;
  Printf("Enter a no!");
  Scanf("%d", &n);
  primefactor (n);
  return 0;
}
Void Prime_factor (int n)
{ int i;
  for (i=2; i<=n/2; i++)
    if (n==1)
      break;
    while (n%i==0) {
    n=n/i;
    Printf("%d ", i);
  }
  }
}
```