**Kliponn= , ARRAY**

**CpE 112 –** Programming Logic and Design

An **array** is a container object that holds a fixed number of values of a single type.

1. **Printing real numbers from 2 to desired range using an array.**

#include<stdio.h>

main(){

long real,i,range;

long num[1000];

clrscr();

scanf("%ld",&range);

real = 2;

for (i=0;i<range;i++){

num[i]=real;

real++;

}

for (i=0;i<range;i++){

printf(" %ld ",num[i]);

}

getch();

}

1. **Printing prime numbers from 2 to desired range using an array.**

#include<stdio.h>

main(){

long real,i,j,range,pdrange,a;

long num[1000],count[1000],pdnum[1000];

clrscr();

scanf("%ld",&range);

real = 2;

for (i=0;i<range;i++){

num[i]=real;

real++;

count[i]=0;

for (j=2;j<num[i];j++){

if (num[i]%j==0){

count[i]++;

}

}

}

pdrange=0;

a=0;

for (i=0;i<range;i++){

if (count[i]==0){

pdnum[a]=num[i];

a++;

pdrange++;

}

}

for (i=0;i<pdrange;i++){

printf(" %ld ",pdnum[i]);

}

getch();

}

1. **Printing binary numbers from 2 to desired range using an array.**

#include<stdio.h>

main(){

long real,i,range,base;

long num[1000],bin[1000],rem[1000];

clrscr();

scanf("%ld",&range);

real = 2;

for (i=0;i<range;i++){

num[i]=real;

real++;

}

for (i=0;i<range;i++){

bin[i]=0;

base=1;

for (;num[i]>0;){

rem[i]=num[i]%2;

bin[i]=bin[i]+rem[i]\*base;

base=base\*10;

num[i]=num[i]/2;

}

}

for (i=0;i<range;i++){

printf(" %ld ",bin[i]);

}

getch();

}

1. **Enter numbers, terminate when pressed by 0, then print it reversed form using an array.**

#include<stdio.h>

main(){

long real,i,range;

long num[1000],key[1000],bin[1000],temp[1000],rev[1000];

clrscr();

range = 0;

for (i=0;;i++){

scanf("%ld",&real);

if (real == 0){

break;

}

else{

num[i]=real;

range++;

}

}

for (i=0;i<range;i++){

key[i]=num[i];

temp[i]=0;

for (;key[i]!=0;){

temp[i]=key[i]%10;

key[i]=key[i]/10;

rev[i]=temp[i]+(rev[i]\*10);

}

}

for (i=0;i<range;i++){

printf(" %ld ",rev[i]);

}

getch();

}