



Very Very Important C Programs

(For theory and Practical Lab Exam)

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1. Add the numbers of a Array

```
#include<stdio.h>
int main()
{
    int c,n,arr[100],sum=0;
    printf("Enter total number to add\n");
    scanf("%d",&n);
    printf("Enter the number\n");
    for(c=0; c<n; c++)
    {
        scanf("%d",&arr[c]);
        sum=sum+arr[c];
    }
    printf("The Sum is =%d",sum);
    return 0;
}
```

2. Add the digits of a Number

```
#include<stdio.h>
int main()
{
    int n,sum=0,t,remainder;
    printf("Enter number\n");
    scanf("%d",&n);
    t=n;
    while(t!=0)
    {
        remainder=t%10;
        sum=sum+remainder;
        t=t/10;
    }
    printf("The Sum is %d",sum);

    return 0;
}
```

3. Area and Circumference of a Circle

```
#include<stdio.h>
float PI=3.1416;
int main()
{
    float r,area,circumference;
    printf("Enter radius\n");
    scanf("%f",&r);

    area=PI*r*r;
    printf("Area of a circle is=%.4f\n",area);

    circumference=2*PI*r;
    printf("circumference of a circle is=%.4f\n",circumference);
    return 0;
}
```

4. Armstrong Number Checking

```
#include<stdio.h>
int power(int,int);
int main()
{
```

```

    int
temp,n,total_digits=0,remainder,sum=0,power_digit,remainder_base;
printf("Enter the number\n");
scanf("%d",&n);
temp=n;
while(temp !=0)
{
    total_digits++;//It will calculate total digit
entered//printf("%d",total_digits);
    temp=temp/10;
}
power_digit=total_digits;
temp=n;
while(temp !=0)
{
    remainder_base=temp%10;
    sum=sum+power(remainder_base,power_digit);
    temp=temp/10;
}
if(n==sum)
{
    printf("%d is a armstrong number\n",n);
}
else
{
    printf("%d is not a armstrong number\n",n);
}
}

int power(int remainder_base,int power_digit)
{
    int power=1,i;
    for(i=1; i<=power_digit; i++)
    {
        power=power*remainder_base;
    }
    return power;
}

```

5. ASCII value

```

#include<stdio.h>
int main()
{
    char c;
    printf("Enter Character\n");
    scanf("%c",&c);

    printf("Ascii vaue of %c is =%d",c,c);
}

```

```
    return 0;
}
```

6. Binary Searching

```
#include <stdio.h>

int main()
{
    int c, first, last, middle, n, search, array[100];

    printf("Enter number of elements\n");
    scanf("%d",&n);

    printf("Enter %d integers\n", n);

    for (c = 0; c < n; c++)
        scanf("%d",&array[c]);

    printf("Enter value to find\n");
    scanf("%d", &search);

    first = 0;
    last = n - 1;
    middle = (first+last)/2;

    while (first <= last)
    {
        if (array[middle] < search)
        {
            first = middle + 1;
        }
        else if (array[middle] == search)
        {
            printf("%d found at location %d.\n", search, middle+1);
            break;
        }
        else
        {
            last = middle - 1;
            middle = (first + last)/2;
        }
    }
    if(first > last)
    {
```

```

        printf("Not found! %d is not present in the list.\n",
search);
    }

    return 0;
}

```

7. Binary to Decimal

```

#include<stdio.h>
int convertBinaryToDecimel(long long n);
int main()
{
    long long n,convert;
    printf("Enter binary number\n");
    scanf("%lld",&n);
    convert=convertBinaryToDecimel(n);

    printf("After conversion %lld to decimel:%d\n",n,convert);

    return 0;
}
int convertBinaryToDecimel(long long n)
{
    int remainder,decimel=0,i=0;
    while(n!=0)
    {
        remainder=n%10;
        n=n/10;
        decimel=decimel+ remainder*pow(2,i);
        i++;
    }
    return decimel;
}

```