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**Practical – 11: Program to implement Dynamic Memory Allocation & File Handling Operations**

1. **Write a program to copy the content of one file into another.**

#include <stdio.h>

int main()

{

FILE \*fptr1, \*fptr2;

char c;

// Open one file for reading

fptr1 = fopen("Input.txt, "r");

fptr2 = fopen(filename, "w");

// Read contents from file

c = fgetc(fptr1);

while (c != EOF){

fputc(c, fptr2);

c = fgetc(fptr1);

}

fclose(fptr1);

fclose(fptr2);

return 0;

}

1. **Write a program to count the number of words and number of characters in a file.**

#include <stdio.h>

int main()

{

FILE \* file;

char ch;

int characters, words, lines;

/\* Open source files in 'r' mode \*/

file = fopen("test.txt", "r");

\*/

characters = words = lines = 0;

while ((ch = fgetc(file)) != EOF)

{

characters++;

/\* Check new line \*/

if (ch == '\n' || ch == '\0')

lines++;

if (ch == ' ' || ch == '\t' || ch == '\n' || ch == '\0')

words++;

}

if (characters > 0)

{

words++;

lines++;

}

printf("\n");

printf("Total characters = %d\n", characters);

printf("Total words = %d\n", words);

printf("Total lines = %d\n", lines);

fclose(file);

return 0;

}

1. **Write a program to implement malloc().**

#include<stdio.h>

#include<conio.h>

#include<stdlib.h>

void main()

{

int \*ptr,n,i;

printf("Enter how many numbers uou want enter:");

scanf("%d",&n);

ptr=(int \*)malloc(n\*sizeof(int));

for(i=0;i<n;i++)

{

scanf("%d",ptr+i);

}

for(i=0;i<n;i++)

{

printf("%d ",\*(ptr+i));

}

getch();

}

1. **Write a program to implement calloc().**

#include<stdio.h>

#include<conio.h>

#include<stdlib.h>

void main()

{

int \*ptr,n,i;

printf("Enter how many numbers uou want enter:");

scanf("%d",&n);

ptr=(int \*)calloc(10,sizeof(int));

for(i=0;i<n;i++)

{

scanf("%d",ptr+i);

}

for(i=0;i<n;i++)

{

printf("%d ",\*(ptr+i));

}

getch();

}