```
DIR *dirp = opendir(argv[1]);
if (dirp == NULL)
{
    perror ("Failed to open directory");
    return EXIT_FAILURE;
  struct dirent *direntp;
  while ((direntp = readdir(dirp)) != NULL)
    {
      if (strcmp(direntp->d_name, ".") != 0 &&
          strcmp(direntp->d_name, "..") != 0)
{
printf("Files: %s\n", direntp->d_name);
if (direntp->d_type == DT_REG)
{
    char filepath[1024];
    snprintf(filepath, sizeof(filepath),
    "%s/%s", argv[1], direntp->d_name);
    printf("contents of %s:\n", filepath);
    system("cat %s", filepath);
}
printf("\n");
}
}
if (closedir(dirp) == -1)
{
    perror("Failed to close directory");
    return EXIT_FAILURE;
}
return EXIT_SUCCESS;
}
```

Output

```
#include <stdio.h>
#include <stdlib.h>
#include <dirent.h>
#include <errno.h>
#include <string.h>
void read_file(const char *filepath)
{
FILE *file = fopen(filepath, "r");
if (file == NULL)
{
    perror("Failed to open file");
    return;
}
char line[256];
while (fgets(line, sizeof(line), file) != NULL)
{
    printf("%s", line);
}
fclose(file);
}
int main(int argc, char *argv[])
{
    if (argc != 2)
    {
        fprintf(stderr, "usage: %s <directory_name>\n",
            argv[0]);
        return EXIT_FAILURE;
    }
```

Q.

Design, develop and implement program to simulate the working of shortest Remaining Time First Scheduling Experiment with different with different length jobs.

Algorithm:- Shortest Remaining Time implementaion

Purpose:- To represent the working of the shortest remaining time algorithm.

Input:- No of processes. Burst time of each process and Quantum time.

Output:- Average waiting time and Turnaround time.

```
printf(" Process ID Burst time waiting time turn
        Around time \n");
float tot =0.0;
float tot =0.0;
for (i=0; i<n; i++)
{
printf(" %d \t \t ", pid[i]);
printf(" %d \t \t ", bt[i]);
printf(" %d \t \t ", bt[i] + wt[i]);
printf(" %d \t \t ", wt[i]);
printf(" \n");
tot += wt[i];
tot += [wt[i] + bt[i]);
}
float att, awt;
awt = tot/n;
att = tot/n;
printf(" Avg waiting time = %f \n", awt);
printf(" Avg turnaround time = %f ", att);
}
}
```

Anitha

Date: 29/oct/2024 | Exp. Title: "First come First Serve" "Shortest Remaining Time First (SRTF)" | Page No.

Exp. No. 6

Program:- Source code:-

```
#include <stdio.h>
#include <unistd.h>
#include <sys/types.h>
#include <sys/wait.h>
int main()
{
int pid[15];
int bt[15];
int n;
printf("Enter the number of processes");
scanf("%d", &n);
printf("Enter process id of all the process");
for(int i=0; i<n; i++)
{
scanf("%d", &pid[i]);
}
printf("Enter burst time of the processes");
for(int i=0; i<n; i++)
{
scanf("%d", &bt[i]);
}
int i, wt[n];
wt[0]=0;
for(i=1; i<n; i++)
{
wt[i] = bt[i-1] + wt[i-1];
}
```