Rešenja zadataka sa trećeg kolokvijuma iz Operativnih sistema 2, januar 2020.

1. (10 poena)

```
class DiskScheduler {
public:
  DiskScheduler () : in(0), out(0) {}

  Req* get ();
  void put (Req* r);
  void period ();

private:
  static const int NumReqQueues;
  ReqList queue[NumReqQueues];
  int in, out;
};

inline void DiskScheduler::put (Req* r) { queue[in].put(r); }

inline void DiskScheduler::period () { in = (in+1)%NumReqQueues; }

Req* DiskScheduler::get () {
  int oldOut = out;
  do {
    Req* r = queue[out].get();
    if (r) return r;
    out = (out+1)%NumReqQueues;
  } while (out!=oldOut);
  return 0; // No requests, the entire queue is empty
}
```

2. (10 poena)

```bash
#!/bin/bash

if [ $# -ne 1 ]; then
    echo "Nedovoljan broj parametara"
    exit 1
fi

#old_IFS=$IFS
#IFS=$'\n'

count=0

for i in $(find / -iname '*.txt'); do
  if [ -r $i ]; then
    if grep "$1" $i; then
      let count++
    fi
  fi
done

#IFS=$old_IFS

echo "Broj pronadjenih fajlova je $count"
```

3. (10 poena)

```c
#include <stdio.h>
#include <stdlib.h>
#include <unistd.h>
int main(void) {
  int nnpd[2];
  pipe(nnpd);
  if (!fork()) {
    close(1); /* close stdout */
    dup(nnpd[1]); /* make stdout same as pipe input*/
    close(nnpd[0]);
    execl ("/bin/ls", "/bin/ls", NULL);
 } else {
    close(0); /* close stdin */
    dup(nnpd[0]); /* make stdin same as pipe output*/
    close(nnpd[1]);
    execl("/usr/bin/sort", "/usr/bin/sort", NULL);
 }
 return 0;
}
```